

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK

-----X  
689 EATERY CORP., etc., *et ano.*, :

Plaintiffs, :

- against - :

Civil Action No.  
02 CV 4431 (LJL)

THE CITY OF NEW YORK, et al., :

Defendants. :

-----X  
59 MURRAY ENTERPRISES INC., etc., *et al.*, :

Plaintiffs, :

- against - :

Civil Action No.  
02 CV 4432 (LJL)

THE CITY OF NEW YORK, et al., :

Defendants. :

-----X  
CLUB AT 60<sup>TH</sup> STREET, INC., etc., *et al.*, :

Plaintiffs, :

- against - :

Civil Action No.  
02 CV 8333 (LJL)

THE CITY OF NEW YORK, :

Defendant. :

-----X  
336 LLC., etc., *et al.*, :

Plaintiffs, :

- against - :

Civil Action No.  
18 CV 3732 (LJL)

THE CITY OF NEW YORK, :

Defendant. :

-----X

**VOLUME 9 OF EXHIBITS TO  
JOINT REQUEST AND STIPULATIONS REGARDING  
THE TAKING OF JUDICIAL NOTICE**

JNR-001352

**EXHIBITS VOL. 9 of 10; pp. JNR-001355 – JNR-001508**  
**(Exhibits 60 through 70)**

<u>Exhibit 60</u>	Stipulation and Agreement, dated August 2, 2017, executed by Erica T. Dubno, counsel for the Bookstore Plaintiffs, and Assistant Corporation Counsel Sheryl Neufeld, counsel for the City of New York	001355-001360
<u>Exhibit 61</u>	Moss and Quing, "The Dynamic Population of Manhattan", Rudin Center for Transportation Policy and Management of the New York University Wagner School of Public Service (2012) ( <a href="https://wagner.nyu.edu/files/faculty/publications/dynamic_pop_manhattan.pdf">https://wagner.nyu.edu/files/faculty/publications/dynamic_pop_manhattan.pdf</a> )	001361-001385
<u>Exhibit 62</u>	Linz and Paul, "Measuring the Secondary Effects of 60/40 Businesses in New York City: A Study of Calls For Service to the Police", including Figures and Tables (2005) (Exhibits 6 and 6A admitted into evidence at evidentiary hearing held on February 23 through March 2, 2009 in <i>Ten's Cabaret, Inc. v. City of New York</i> , Supreme Court, New York County, Index No. 121197 /2002	001386-001436
<u>Exhibit 63</u>	Freeman, "Examining The Relationship Between Businesses That Comply With the ' 60/40' Zoning Regulations and Surrounding Property Values in New York City" (2008) (Exhibit 8 admitted in evidence at evidentiary hearing held on February 23 through March 2, 2009 in <i>Ten's Cabaret, Inc. v. City of New York</i> , Supreme Court, New York County, Index No. 121197 /2002	001437-001471
<u>Exhibit 64</u>	Focus Probe, Inc., "Perceived Differences Between Adult Entertainment Clubs With ' Subdued Facades ' vs. 'Loud Facades', with photographs (Exhibits 12, 12A, 12B and 12C admitted in evidence at evidentiary hearing held on February 23 through March 2, 2009, in <i>Ten's Cabaret, Inc. v. City of New York</i> , Supreme Court, New York County, Index No. 121197 /2002)	0011472-001495
<u>Exhibit 65</u>	Charles V. Bagli, "Going Out With a Building Boom, Mayor Pushes Billions in Projects", N.Y. Times, Dec. 15,2013 ( <a href="https://nyti.ms/1hVKOOQ">https://nyti.ms/1hVKOOQ</a> )	001496-001500
<u>Exhibit 66</u>	Ford Fessenden, "The Bloomberg Years: Reshaping New York", N.Y. Times, Aug. 18, 2013 (interactive feature) ( <a href="http://www.nytimes.com/newsgraphics/2013/08/18/reshaping-new-york/index.html">http://www.nytimes.com/newsgraphics/2013/08/18/reshaping-new-york/index.html</a> )	001501

<u>Exhibit 67</u>	Jonathan Lemire, "Michael Bloomberg's NYC Mayoralty Comes to an End", Associated Press, Jan. 1, 2014 ( <a href="https://www.dailyfreeman.com/news/michael-bloomberg-s-nyc-mayoralty-comes-to-an-end/article901c8f2f-labd-5150-b23d-9fc9674265b3.html">https://www.dailyfreeman.com/news/michael-bloomberg-s-nyc-mayoralty-comes-to-an-end/article901c8f2f-labd-5150-b23d-9fc9674265b3.html</a> )	001502-001503
<u>Exhibit 68</u>	James Dao, "The 1993 Elections: Staten Island; Secession is Approved; Next Move is Albany's", N.Y. Times, Nov. 3, 1993 ( <a href="https://www.nytimes.com/1993/11/03/nyregion/the-1993-elections-staten-island-secession-is-approved-next-move-is-albany-s.html">https://www.nytimes.com/1993/11/03/nyregion/the-1993-elections-staten-island-secession-is-approved-next-move-is-albany-s.html</a> )	001504-001506
<u>Exhibit 69</u>	List of 28 "Manhattan Lots Identified By Both City and Plaintiffs as Legally Permissible for Adult Use Establishments and Where Both Plaintiffs and Defendants Agree That At Least Some Types of New Commercial Business Could Be Established" as of October 31, 2018	001507
<u>Exhibit 70</u>	List of 36 "Existing Manhattan Lots That Allow[ed] Adult Use Establishments" as of October 31, 2018	001508

### STIPULATION AND AGREEMENT

WHEREAS, the law firm of Fahringer & Dubno, 767 Third Avenue, Suite 3600, New York, New York 10017, has represented to the City of New York (“City”) that it is counsel for the one or more entities that are subject to Text Amendment N 010508 ZRY to the City’s Zoning Resolution (“2001 Resolution”) as it relates to bookstores (as defined in City Zoning Resolution 12-10) with individual enclosures where adult movies or live performances are available for viewing by customers (“Bookstores with Booths”); and

WHEREAS, Fahringer & Dubno has stated that it is prepared to commence an action in the United States District Court for the Southern District of New York on behalf of one or more Bookstores with Booths that are subject to the 2001 Resolution, and to seek to apply for a temporary restraining order (“TRO”) in that action that would prohibit the City from enforcing the 2001 Resolution against Bookstores with Booths; and

WHEREAS, Fahringer & Dubno has also stated that it will seek to mark its intended action as related to four actions commenced in 2002 by “60/40 topless clubs;” (“Topless Club Cases”) and

WHEREAS, the Topless Club Cases were closed by Judge Pauley in 2003 in light of action taken in the New York State Supreme Court with respect to the

2001 Resolution with the caveat that the cases “may be re-opened on a showing of good cause by petition of any party;” and

WHEREAS, the attorneys for the plaintiffs in the Topless Club Cases have written to Judge Pauley to advise that they will likely be petitioning the Court in the near future to reopen the previously closed cases; and

WHEREAS, Judge Pauley previously indicated that he did not want to entertain re-opening the Topless Club Cases until there was a final resolution of all pending state court actions challenging the 2001 Resolution; and

WHEREAS, on June 6, 2017 the New York Court of Appeals upheld the 2001 Resolution and one or more of the state court plaintiffs have indicated that they will be filing a petition for writ of certiorari to the United States Supreme Court;

WHEREAS, the City and Fahringer & Dubno on behalf of one or more Bookstores with Booths, seek to streamline federal court litigation regarding the 2001 Resolution and to resolve the application for a TRO in accordance with the following terms;

NOW, THEREFORE, IT IS HEREBY STIPULATED AND AGREED BY AND AMONG THE UNDERSIGNED THAT by August 11, 2017, Fahringer & Dubno, as counsel for one more Bookstores with Booths, will deliver to the

undersigned attorneys for the City of New York by e-mail, a copy of its intended complaint to be filed in the United States District Court for the Southern District of New York in connection with the 2001 Resolution as it relates to Bookstores with Booths (“Intended Complaint”); and

IT IS FURTHER STIPULATED AND AGREED THAT after delivery to the undersigned attorneys for the City of New York, other than to add a description of the outcome of any cert petitions in the state cases, the Intended Complaint will not be amended and will be filed by Fahringer & Dubno within 60 days after final disposition by the United States Supreme Court of any/all timely filed cert petition(s) in the state cases; and

IT IS FURTHER STIPULATED AND AGREED THAT at the time the Intended Complaint is filed, Fahringer & Dubno will also file a Motion for a Preliminary Injunction to enjoin enforcement of the 2001 Resolution against Bookstores with Booths; and

IT IS FURTHER STIPULATED AND AGREED THAT notwithstanding the language in two paragraphs immediately preceding this paragraph, the City may, at any time upon 30-days written notice to Fahringer & Dubno, require that the Intended Complaint and Motion for a Preliminary Injunction be filed prior to any resolution by the Supreme Court of the United States; and

IT IS FURTHER STIPULATED AND AGREED THAT the City's response to the filed Complaint and Motion for a Preliminary Injunction shall be served and filed (by ECF) within sixty (60) days of the date the Complaint and Motion for a Preliminary injunction are filed with the Court; and

IT IS FURTHER STIPULATED AND AGREED THAT counsel for the Bookstore Plaintiffs consents to any extensions of time requested or sought by the Defendants; and

IT IS FURTHER STIPULATED AND AGREED THAT two weeks after receiving any opposition by the Defendants, counsel for the Bookstore Plaintiffs shall serve and file (by ECF) any reply in further support of the motion for a preliminary injunction; and

IT IS FURTHER STIPULATED AND AGREED THAT pending determination of the timely filed motion for a preliminary injunction in this Action by the Bookstore Plaintiff(s), the City, its officers, agents, servants and employees, and all other persons acting under or on its behalf will refrain from enforcing the 2001 Resolution against Bookstores with Booths; and

IT IS FURTHER STIPULATED AND AGREED THAT nothing in this stipulation prevents the City from enforcing the provisions of City Zoning Resolution Text Amendment N 950384 ZRY; and

IT IS FURTHER STIPULATED AND AGREED THAT nothing in this stipulation prevents the City from enforcing any provision of the 2001 Resolution besides City Zoning Resolution § 12-10 Definition of Adult Establishment (2)(d)(bb), (2)(d)(ff), and (2)(d)(ii); and

AFTER AUGUST 9, 2017  
etd.

IT IS FURTHER STIPULATED AND AGREED THAT nothing in this stipulation prevents the City from enforcing the provisions of the 2001 Resolution as to Bookstores with Booths that commence operating after June 6, 2017, when the New York Court of Appeals issued its Remittitur in For the People Theatres v. City of New York, No. 121080/02, APL 2015-00273; and



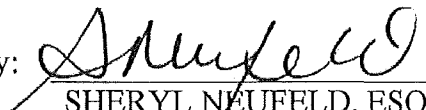
IT IS FURTHER STIPULATED AND AGREED THAT neither party will rely on this agreement to suggest that any party has made any admission, concession, or other waiver of any kind with respect to the merits of the claims in the Intended Complaint.

Dated: August 2, 2017

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# **The Dynamic Population of Manhattan**

**Mitchell L. Moss and Carson Qing  
Rudin Center for Transportation Policy and Management  
Wagner School of Public Service  
New York University**

**March, 2012**

## Introduction

We cannot understand Manhattan in the 21<sup>st</sup> century by relying on conventional measures of urban activity. Simply put, Manhattan consists of much more than its residential population and daily workforce. This island, measuring just 22.96 square miles, serves approximately 4 million people on a typical weekday, 2.9 million on a weekend day, and a weekday night population of 2.05 million. Manhattan, with a residential population of 1.6 million more than doubles its daytime population as a result of the complex network of tunnels, bridges, railroad lines, subways, commuter rail, ferry systems, bicycle lanes, and pedestrian walkways that link Manhattan to the surrounding counties, cities and towns.

This transportation infrastructure, largely built during the twentieth century, is operated by the City of New York, Metropolitan Transportation Authority, and Port Authority of New York & New Jersey. The infrastructure network generates a constant flow of people who are responsible for Manhattan's emergence as a world capital for finance, media, fashion, and the arts.

The residential population count does not include the 1.6 million commuters who enter Manhattan every weekday, or the hundreds of thousands of visitors who use Manhattan's tourist attractions, hospitals, universities, and nightclubs. This report analyzes the volume of people flowing in and out of Manhattan during a 24-hour period; we provide an upper estimate of the actual number of people in Manhattan during a typical work day.

## Manhattan: A city of 4 million

- **Manhattan's daytime population is approximately 3.94 million; the census-defined daytime population omits almost one-fourth of the total, or nearly 800,000 people.** The daytime population consists of approximately 1.61 million commuting workers, 1.46 million local residents, 404,000 out-of-town visitors, 374,000 local day-trip visitors, 17,000 hospital patients, and 70,000 commuting students.
- **52% of Manhattan's Census-defined daytime population consists of individuals who do not live in Manhattan and commute there for work.** Every day, 1.63 million commuters enter Manhattan for work, while 132,000 Manhattan residents commute elsewhere for work

- According to the US Census definition of “daytime population,” there are approximately **3.1 million** people in Manhattan during the work day, compared to a residential population of **1.6 million** people at night.
- **The weekend daytime population of Manhattan is approximately 2.9 million people**, with 565,000 commuting workers and 1.54 million local residents; **the weekday night time population is at most 2.05 million**, suggesting that there could be to up to 471,000 more people in Manhattan at night consisting of late night workers, “night-trip” visitors from the outer boroughs and suburbs, hospital patients, and overnight visitors, in addition to the 1.58 million local residents.
- The total **number of people in Manhattan can vary dramatically at different times of the day and week**. Population estimates based on the US Census measure the residential population of each neighborhood, but the population density of key areas of Manhattan are substantially greater during the day with the inflows of commuters, and certain neighborhoods attract visitors at night in far excess of the residential population.
- Peak population events, or “day-trip” events, draw in people from across the city and region could potentially push Manhattan’s daytime population well above 4 million, perhaps even 5 million, depending on the conditions and circumstances.
- **Manhattan has the greatest increase in population during the day among all U.S. counties or administrative equivalents (+1.49 million)**, and the highest ratio between day and night population (1.92), which suggests that there are nearly double as many people in Manhattan during the day than at night during a typical work day.
- **Queens, Brooklyn, and The Bronx, in that order, have the greatest decrease in population during the day of all U.S. counties**; there are approximately 366,000 fewer people in Queens during the day than at night.
- **Four out of every five Manhattan-bound commuters from the outer boroughs and suburbs travel to work by public transit each day**: 50.1% by subway, 17.1% by rail, and 13.8% by bus. Recent trends in subway ridership indicate that the greatest increase in trips by time of day over the past decade occurred during late night hours, from 7 PM to 6 AM, and during weekends, highlighting that **population flows into, out of, and within Manhattan are no longer occurring only at peak commuting hours**.
- Manhattan’s capacity to accommodate high volumes of population flow allows it to serve as the **transaction-maximizing** place (Meier, 1968).

## The Census-defined Daytime Population

The U.S. Census Bureau's definition of "total population" is based on where people live; planners traditionally analyze demographic data from the metropolitan level to the census block level based on residential population. An understanding of the actual number of people in Manhattan, or any other major commuting district, during the day is critical for planners, developers and transportation agencies. Measuring the flow of people during daytime hours in Manhattan and the actual day and night population of commuters, residents, visitors, and students is essential given the changing pattern of work and life in the 21<sup>st</sup> century. Admittedly, the U.S. Census Bureau does provide a formula used to approximate its definition of daytime population for large geographic areas:

$$\begin{aligned} & (Number\ of\ workers - Workers\ living\ in\ the\ area) \\ & + \\ & (Total\ Population - Residents\ working\ outside\ the\ area) \end{aligned}$$




The smallest census geographies that this formula can be applied to, based on the most recent American Community Survey population and worker estimates, are counties and census-designated places (CDPs). The census-defined daytime population does not include other key segments of the population, such as commuting students and overnight and day-trip visitors to a given geographic area. It only captures the change in daytime population due to commuting for work.

## Estimating the Actual Daytime Population

Manhattan's population varies by type of day and night, and encompasses far more people than those who simply live or work on this island, as the following table indicates.



By measuring the actual daytime population in Manhattan, it is clear that the Census-defined daytime population ignores up to 25% of the actual population. The table below provides a more detailed summary of each group of people included in these estimates: commuting workers, local residents, out-of-town visitors, day-trip visitors, hospital patients, and commuting students.

 <b>WEEKDAY DAYTIME POPULATION, 2010</b>							
<i>Estimate</i>	<i>Commuting workers</i>	<i>Local residents</i>	<i>Out-of-town visitors</i>	<i>Day-trip Visitors</i>	<i>Hospital users</i>	<i>Commuting students</i>	<i>TOTAL</i>
<b>Upper</b>	<b>1.61 million</b>	<b>1.46 million</b>	<b>404,256</b>	<b>374,223</b>	<b>18,236</b>	<b>70,054</b>	<b><u>3.94 million</u></b>
<i>Census defined daytime population = 3.07 million. Based on upper estimate, that figure is an undercount of 940,000</i>							
 <b>WEEKEND DAYTIME POPULATION, 2010</b>							
<i>Estimate</i>	<i>Commuting workers</i>	<i>Local residents</i>	<i>Out-of-town visitors</i>	<i>Day-trip Visitors</i>	<i>Hospital users</i>	<i>Commuting students</i>	<i>TOTAL</i>
<b>Upper</b>	<b>564,665</b>	<b>1.54 million</b>	<b>404,256</b>	<b>374,223</b>	<b>18,236</b>	<b>0</b>	<b><u>2.90 million</u></b>
<i>Census defined weekend daytime population = 2.14 million. Based on upper estimate, that figure is an undercount of 880,000</i>							
 <b>WEEKNIGHT POPULATION, 2010</b>							
<i>Estimate</i>	<i>Night-shift Commuters</i>	<i>Local residents</i>	<i>Out-of-town visitors</i>	<i>"Night-trip" visitors</i>	<i>Hospital users</i>	<i>Commuting students</i>	<i>TOTAL</i>
<b>Upper</b>	<b>17,747</b>	<b>1.58 million</b>	<b>404,256</b>	<b>31,863</b>	<b>17,260</b>	<b>0</b>	<b><u>2.05 million</u></b>
<i>Census defined nighttime population = number of local residents, or 1.62 million. Based on upper estimate, that figure is an undercount of 550,000</i>							
Sources: US Census Bureau 2010 American Community Survey, NYC & Company, Audience Research & Analysis, US News and World Report, New York University							

The figures above represent the upper estimates of day, weekend, and night populations in Manhattan: recent Census data indicated that on any given day of the week, no more than 83% of workers actually commute to work. Flexible scheduling and telecommuting have made the journey to work less rigid, as the percent of the labor force at work and commuting to work have both declined nationwide during weekdays since 1996, according to the Census Bureau's Survey of Income and Program Participation. Based on the proportion of American workers at work and commuting to work for each day, the following table was generated to illustrate the fluctuations in daytime population by day of the week, peaking on Wednesday with a total of 3.685 million.



<i>Manhattan's Daytime Population by Day of the Week</i>							
<b>Group</b>	<b>Sun.</b>	<b>Mon.</b>	<b>Tue.</b>	<b>Wed.</b>	<b>Thu.</b>	<b>Fri.</b>	<b>Sat.</b>
Commuters*	219,050	1,321,118	1,338,155	1,339,683	1,332,436	1,297,815	322,172
Residents	1,568,252	1,479,596	1,478,225	1,478,102	1,478,685	1,481,470	1,559,956
Visitors	778,479	778,479	778,479	778,479	778,479	778,479	778,479
Other	18,236	88,290	88,290	88,290	88,290	88,290	18,236
<b>UPPER ESTIMATE</b>	<b>2,584,000</b>	<b>3,667,000</b>	<b>3,683,000</b>	<b>3,685,000</b>	<b>3,678,000</b>	<b>3,646,000</b>	<b>2,679,000</b>

\*Estimate of commuting workers is based on the percent of U.S. workers who travel to work by day of week, according to 2008 Survey of Income and Program Participation data.

Sources: US Census Bureau 2005-09 American Community Survey, 2008 Survey of Income and Program Participation, NYC & Company, Audience Research & Analysis, US News and World Report, New York University

## Daytime Population Density

An analysis of tract-to-tract worker flow data from the 2000 Census Transportation Planning Package indicates that census tracts in Midtown and Financial District (typically less than one-tenth of a square mile) have up to 70,000 commuters and residents in skyscrapers and office buildings during the day with a population density of up to 980,000 people per square mile (to achieve an equivalent level of density for all of Manhattan, the entire population of Texas would have to relocate to the borough)<sup>1</sup>. If visitors staying in hotels or touring nearby neighborhoods were included, the number of people per square mile could even exceed 1 million in several of these tracts. While density has often been cited as one of the most distinctive features of Manhattan, the actual population density of the most active neighborhoods during the day could still be many times greater when factoring in the 2.5 million total Manhattan workers and other visitors to the city inhabiting the city's offices and hotels.

The transformation of Manhattan's neighborhoods, such as Tribeca, Soho and West Chelsea, from manufacturing to residential uses has contributed to new levels of activity as bars, galleries, restaurants, and nightclubs have emerged in what were once industrial enclaves. The dispersion of a diverse range of activities across Manhattan has enabled it to attract up to 2.5 million non-residents each day.



## Peak Population Events

Manhattan also hosts special events and celebrations that attract millions of additional people from across the city, region, and beyond. While the visitor counts from the figures above (pp. 4-6) are upper estimates, they only represent average counts (see Methodology, p. 18) and do not represent the peak number of visitors to Manhattan, which of course fluctuates greatly over the course of a week or month. These high-volume “day-trip” events that draw in people from across the city and region could potentially push Manhattan’s daytime population well above 4 million, perhaps even 5 million, depending on the conditions and circumstances.

A recent example of this type of event was the New York Giants ticker-tape parade in Lower Manhattan in February 2012: an estimated 1 million Giants fans from across the city and region attended the event, with an estimated one-third of them coming in from outside the city as entire families took the day off from work and school to celebrate the Giants 2012 Super Bowl victory, according to city officials. If we were to assume that:

- 1) One-third of Giants fans coming from outside the city do not work or attend school in Manhattan,
- 2) Another one-third of Giant fans were neither Manhattan residents nor Manhattan workers,
- 3) There was a normal Tuesday inflow of commuters and visitors to Manhattan and that none of these individuals attended the parade,

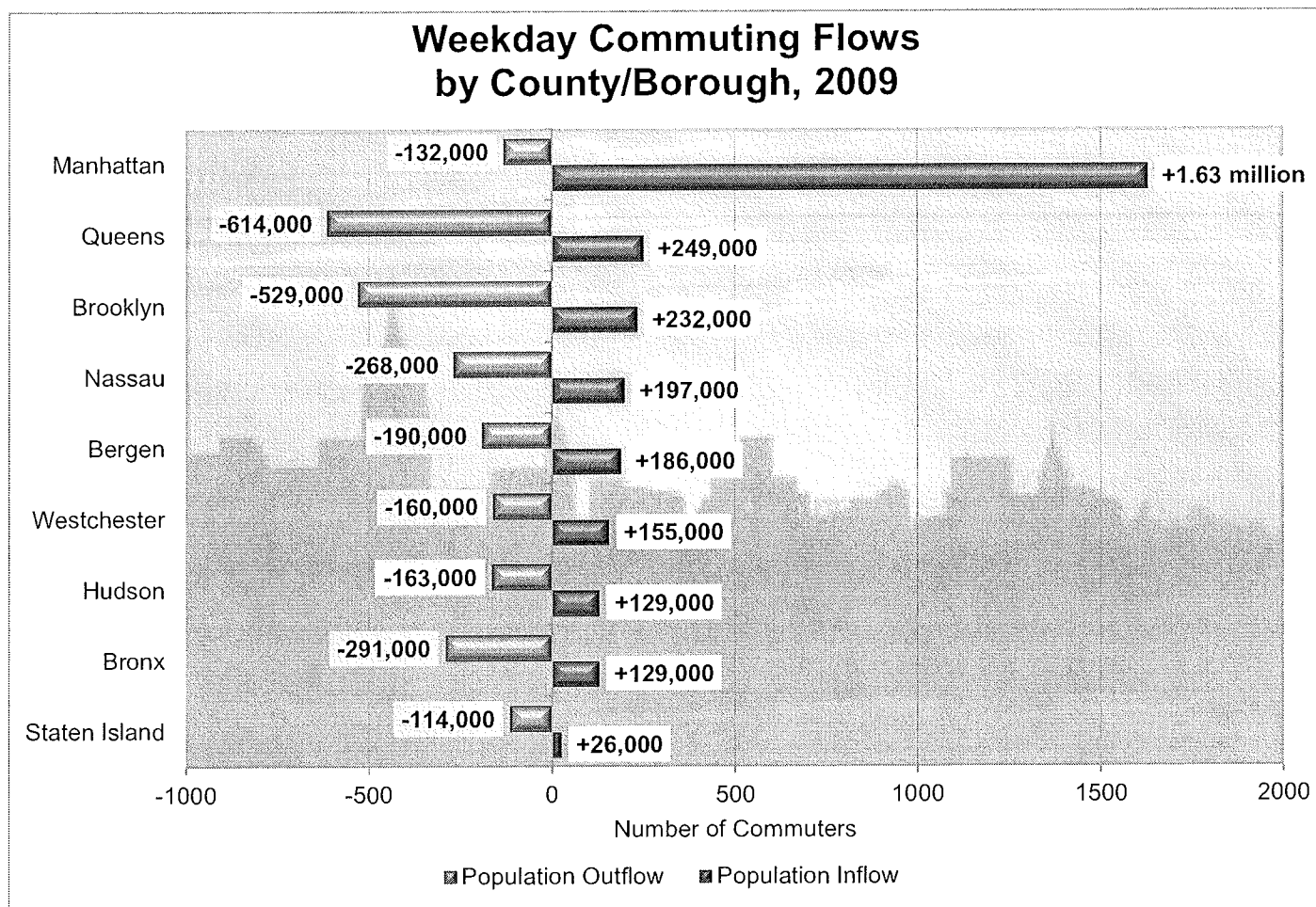
then the daytime population of Manhattan on February 7, 2012 was approximately 4.35 million, much more than the 3.68 million that are usually in Manhattan on a regular Tuesday. Overall, there was an overnight inflow of 2.3 million. What’s more, the daytime population density figures for census tracts along the Canyon of Heroes are among the highest in the nation with 700,000 to 1 million people per square mile, so Manhattan’s multimodal network of subways, buses, trains, ferries, and taxis was essential in accommodating huge numbers of people during one of the busiest morning commutes of the week. Events such as these serve as reminders that although the daytime population figures summarized above are considered “upper estimates,” they are only upper estimates of a regular weekday, weeknight, or weekend in Manhattan, and do not represent the absolute peak population and carrying capacity that Manhattan is capable of temporarily sustaining. The table below summarizes recent peak population events and the estimated daytime population of Manhattan using the same methodology listed above.

<i>Recent Manhattan Peak Population Events</i>			
<i>Event</i>	<i>Date</i>	<i>Estimated Attendance</i>	<i>Estimated Daytime Manhattan Population</i>
2012 New York Giants parade	Tue., February 7, 2012	1 million	<b>4.35 million</b>
2011 New Year's Eve ball drop	Sat., December 31, 2011	1 million	<b>3.35 million</b>
2011 Macy's Thanksgiving parade	Thu.*, November 24, 2011	3.5 million	<b>5.01 million</b>
2009 New York Yankees parade	Fri., November 6, 2009	1.5 million	<b>4.65 million</b>

\*Event occurred on a holiday: treated as a Saturday instead.

### **Manhattan as an Urban Activity District**

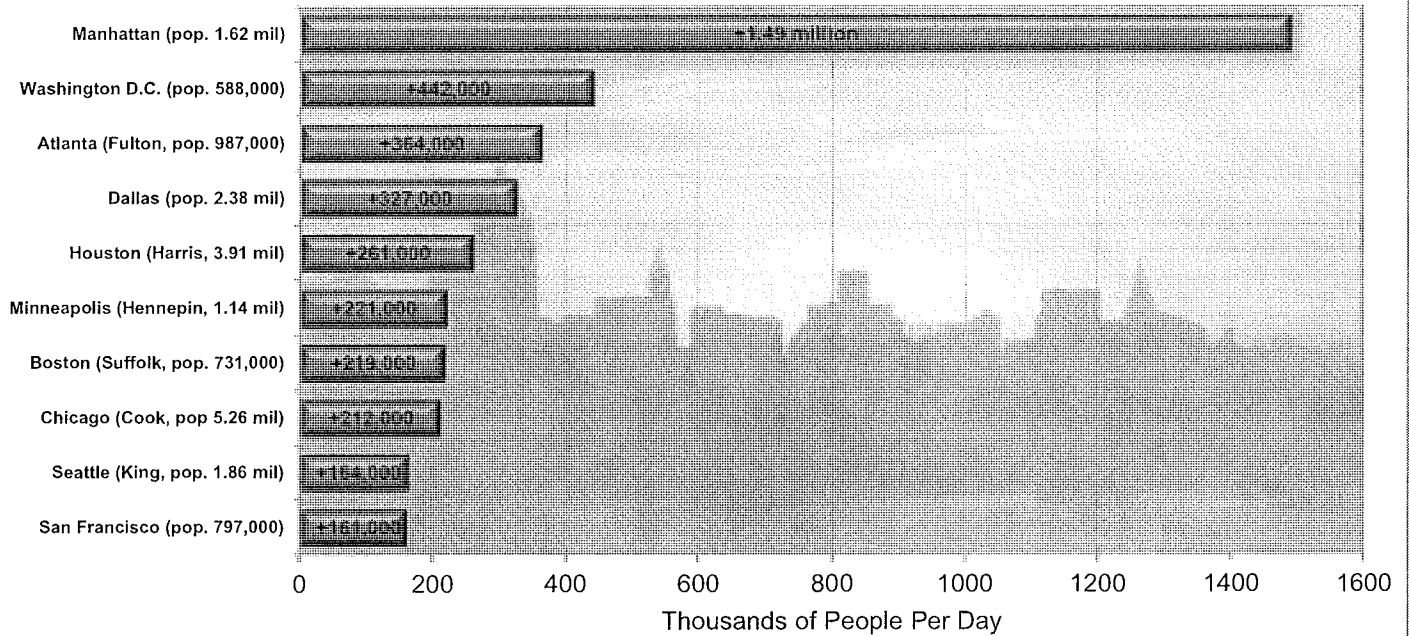
Manhattan's complex and extensive transportation network makes it possible for this island to overcome its geographic obstacles and to bring more than 1.5 million people to work every weekday. Population inflows in Manhattan far exceed those of other nearby counties, and as the chart below indicates, the volume of the daily inflow exceeds that of all four outer boroughs and the four additional inner-ring counties combined:



Source: 2005-09 American Community Survey, US Census Bureau

Manhattan's net population increases by 1.49 million people during the weekday, while New York City's outer boroughs lose hundreds of thousands of residents who are commuting into the central business districts in Manhattan every morning. In contrast, the city's inner ring suburbs experience a more balanced inflow and outflow of commuters during the day. The charts below also illustrate the magnitude of these population inflows and outflows when compared to other regions in the nation. Manhattan has a net population inflow more than three times greater than that of Washington, D.C., the county with second highest net inflow (Figure 1, Appendix). The three greatest net population outflows by county in the entire U.S. are all among the city's outer boroughs, facilitated by an extensive mass transit network that serves millions of people per day (Figure 2).

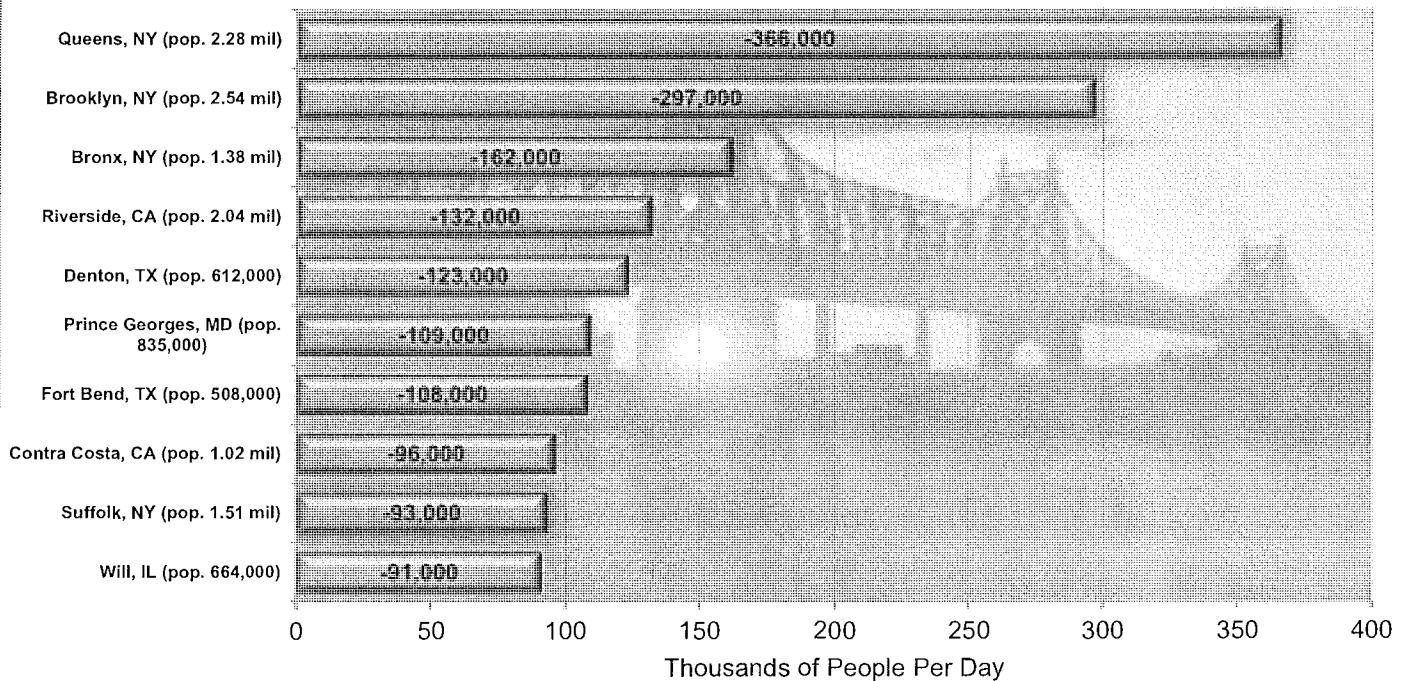
### Top 10 Work Day Population Increases by County, 2009



NOTE: Population figures on Y-axis represent residential population figures.

Source: 2005-09 American Community Survey, US Census Bureau

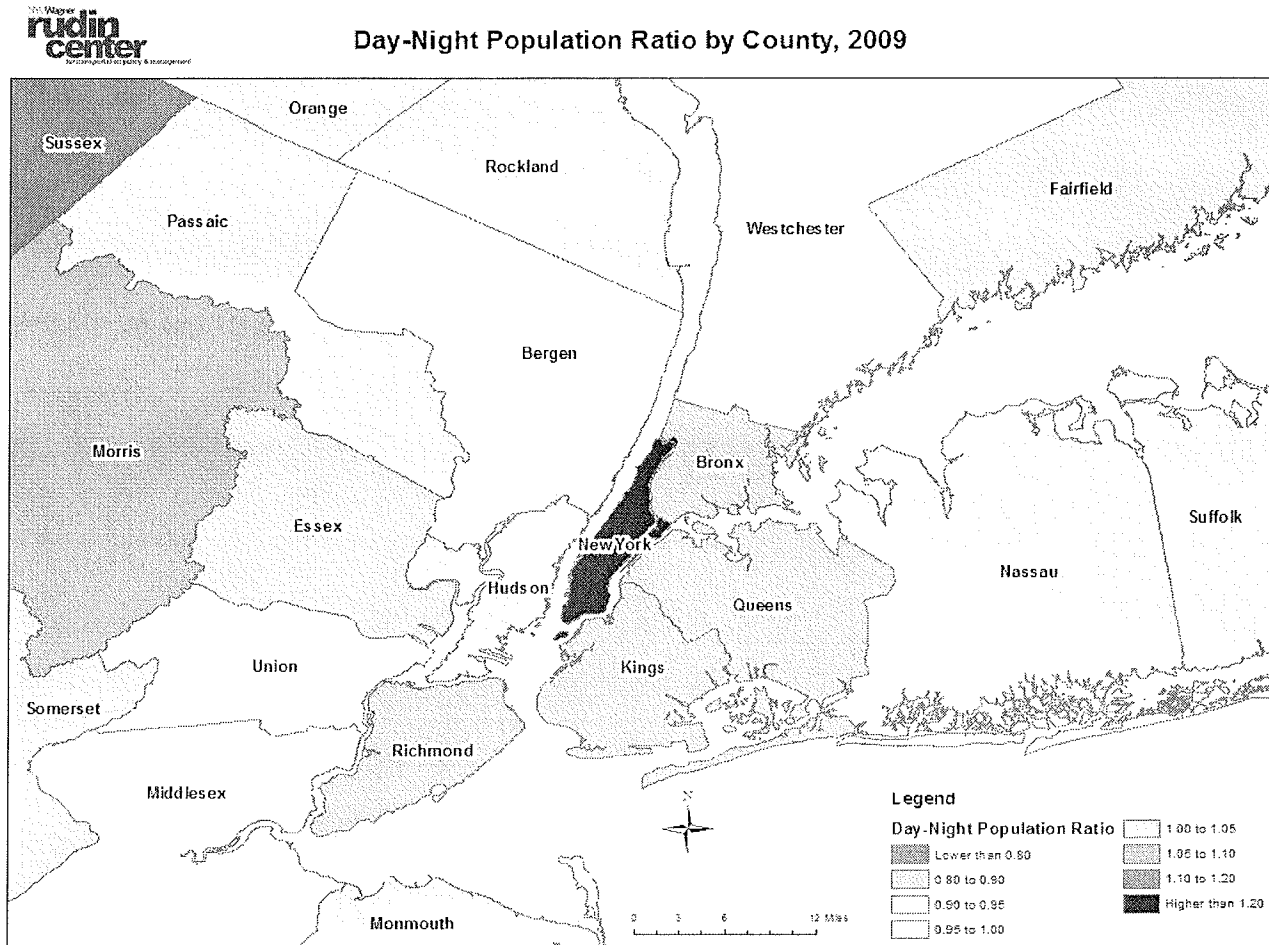
### Top 10 Work Day Population Decreases by County, 2009



NOTE: Population figures on Y-axis represent residential population figures.

Source: 2005-09 American Community Survey, US Census Bureau

The ratio between day and night populations in Manhattan is also the highest in the nation at 1.92; its population nearly doubles after sunrise (Figure 3). The map below also shows that all but four other counties in the New York metropolitan area lose population during the day. (The exceptions are Fairfield County in Connecticut and Essex, Morris, and Somerset counties in New Jersey.)



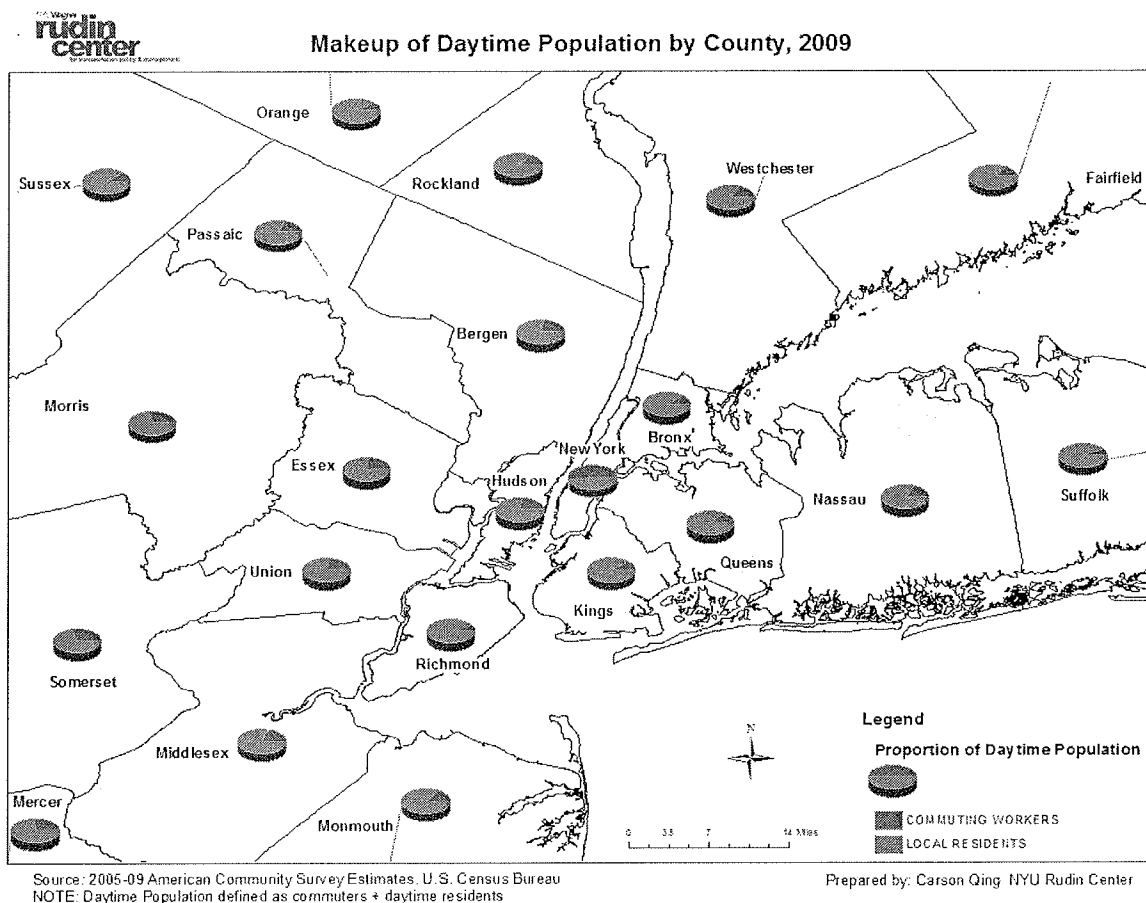
Source: 2005-09 American Community Survey Estimates, U.S. Census Bureau  
NOTE: Daytime Population defined as commuters + daytime residents

Prepared by: Carson Qing, NYU Rudin Center

The characteristics of Manhattan's population also change dramatically during the day, as more than half of the daytime population consists of commuters. This is not unusual, as other cities such as Washington, D.C. and Arlington, Virginia (home of the Pentagon, the largest office building in the world) have a similar share of commuting workers among the population during the day (Figure 4). However, the map below shows that Manhattan is the only part of the New



York City region that has such characteristics, as inflowing commuting workers consist of less than a quarter of the Census-defined daytime population in most other counties.

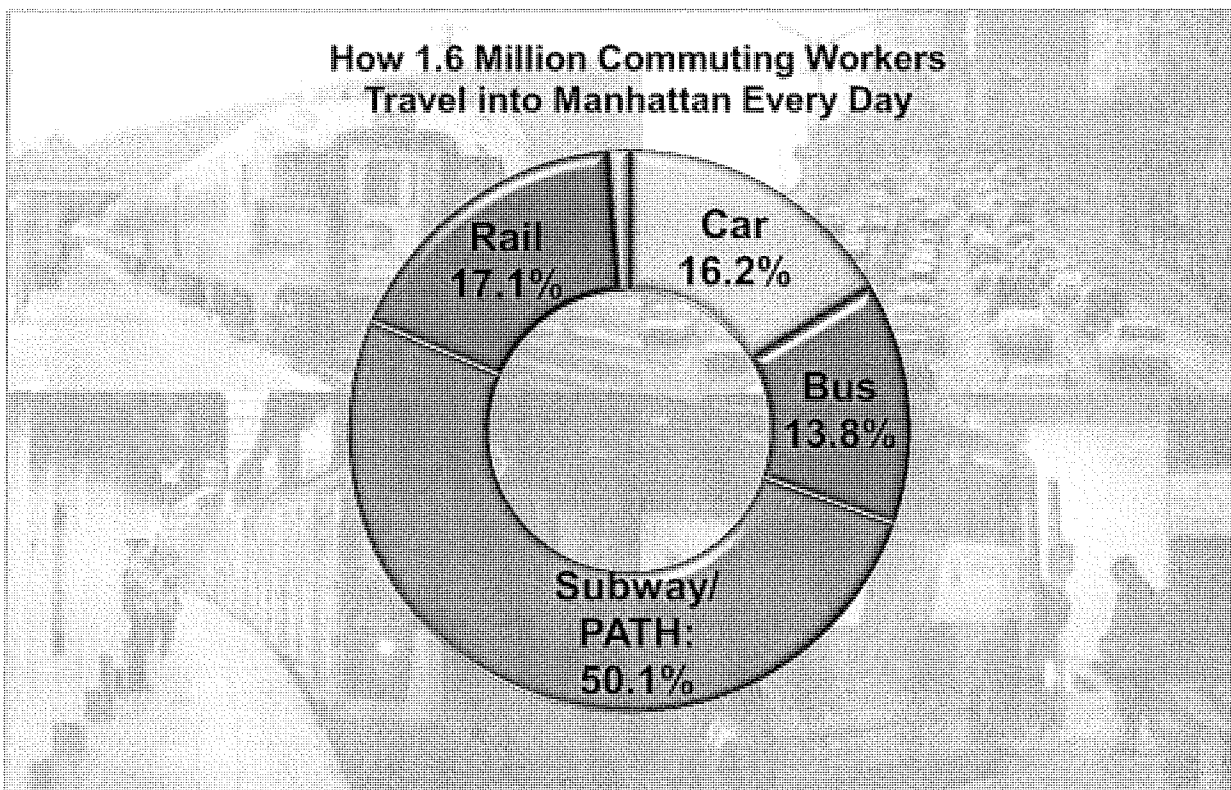


Source: 2005-09 American Community Survey, US Census Bureau

## How Commuters Arrive in Manhattan

Manhattan is able to accommodate an inflow of 1.6 million commuters per day from the outer boroughs and suburbs because of the extensive transportation and mass transit network that includes bridges, tunnels, subways, trains, buses, and ferries. According to New York Metropolitan Transportation Council (NYMTC) estimates, Manhattan-bound subways carried 389,000 passengers during the peak hour of the morning commute (8:00 AM) on an average fall work day into the Manhattan central business district; roughly 6,480 commuters entered the Manhattan CBD *per minute* by subway during the peak commuting hour<sup>ii</sup>. The chart below

shows Census journey to work data on how the 1.6 million commuting workers who do not live in Manhattan travel into the borough: 82% of Manhattan-bound commuters take public transit to work, and 50% of inflowing commuters use the subway as their primary means of travel from the city's outer boroughs, or from Newark, Jersey City, and Hoboken via PATH. In comparison, commuting trips among Manhattan residents is more multimodal in nature, since the lengths of commutes are more manageable, and residents also have better access to the city's extensive taxi and limousine network. (About 58% of Manhattan residents travel to work regularly by mass transit, as they are more likely to walk or bike to work given their shorter commute lengths.) These figures demonstrate the vital role of commuter systems and mass transit – moving huge numbers of people from the outer boroughs and counties into Manhattan each morning and out of Manhattan each evening.

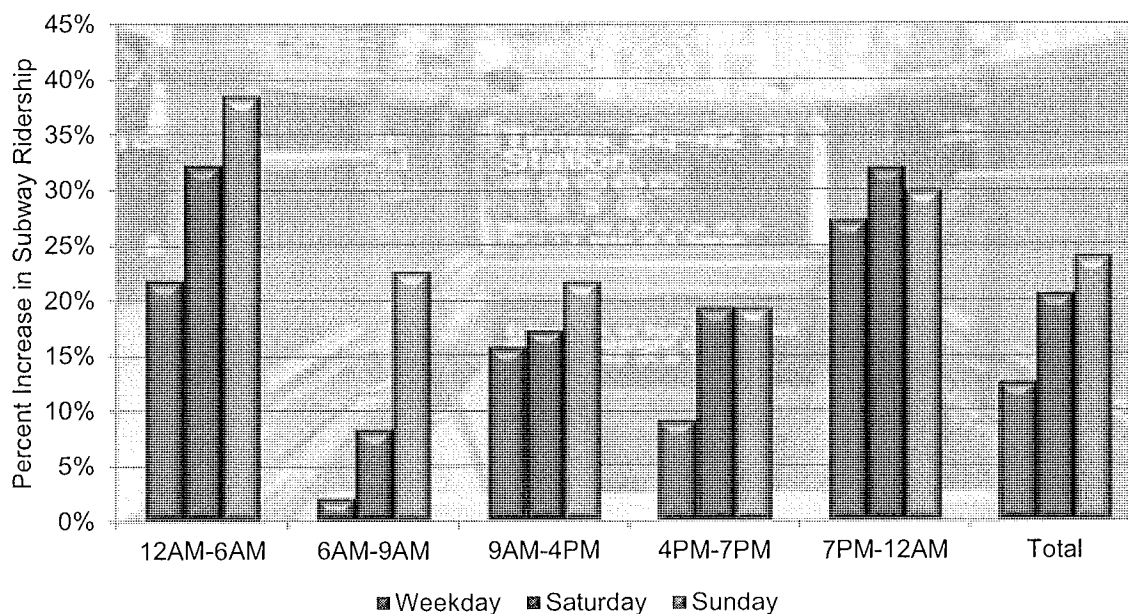


Source: 2005-09 American Community Survey, US Census Bureau

\*NOTE: Assumes that all Manhattan residents travel to jobs in Manhattan

Although rush hour subway trips still account for slightly less than half of its total weekday ridership volume, recent data from the MTA indicates that ridership during off-peak hours, particularly during late nights, is growing faster rush during hour. On weekends, the greatest increase in ridership was between 7 PM and 6 AM, suggesting that the mass transit system is serving far more than the traditional weekday journey to work.

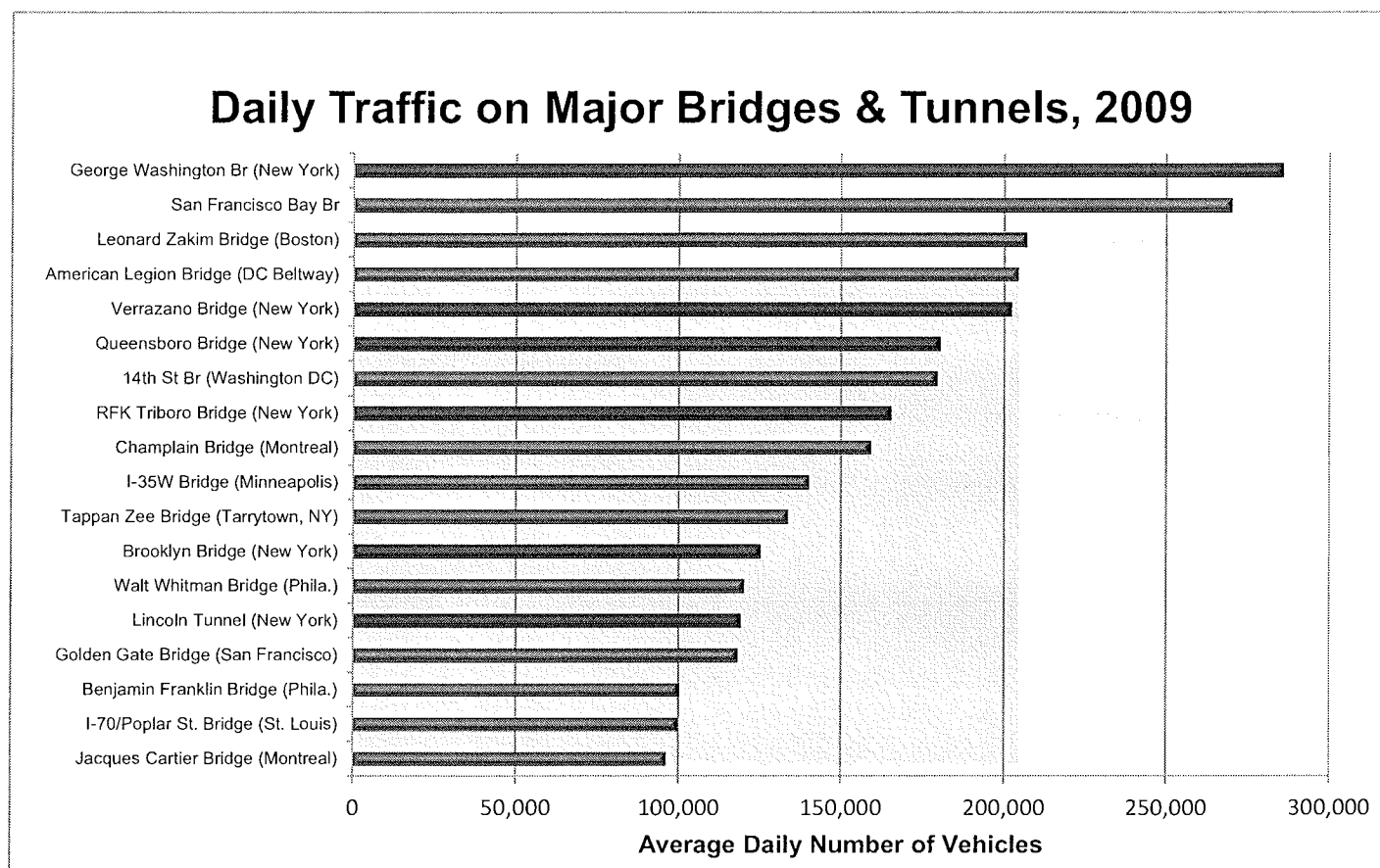
### Increase in Subway Ridership by Time of Day, 2001-10



Source: Metropolitan Transportation Authority (2011)

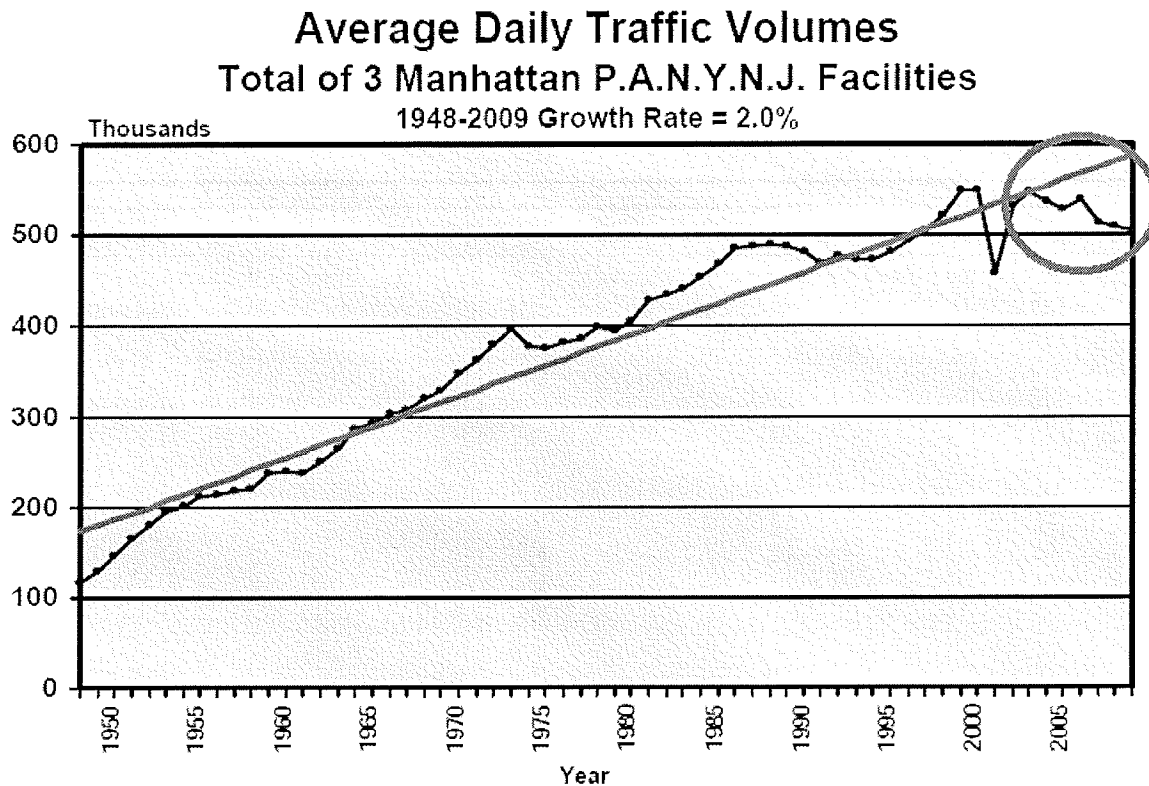
One of every six commuting workers drives to work in Manhattan; the bridge and tunnel connections are of vital importance in serving the inflow of 1.6 million people per day; each crossing serves up to hundreds of thousands of vehicles daily. The George Washington Bridge and the Lincoln Tunnel are among the busiest bridges and tunnels in the world; the chart below compares the average daily traffic flow of major New York City bridges and tunnels to those in other North American cities.





Sources: New York State and City Departments of Transportation and Bridge Authorities

During the past decade, the daily flows of vehicular traffic have declined for most of the major bridge and tunnel crossings into Manhattan, according to the New York City Department of Transportation. In fact, while Census data has indicated the number of Manhattan-bound commuters from Northern New Jersey grew by 21% since 2002, average daily vehicular traffic flow for the Hudson River crossings actually declined over a period longer than five years for the first time since records were kept, starting in 1949. In contrast to the 5% decline in vehicular traffic, NJ Transit ridership has increased by about 24% during this same period, according to American Public Transportation Association ridership statistics. Additionally, PATH ridership reached an all-time high of 76.6 million commuter trips in 2011, according to Port Authority estimates<sup>iii</sup>.



Purple line represents the best-fit line based on average daily traffic volumes in both directions for the three Port Authority-operated Hudson River crossings by year.

Source: New York City Department of Transportation 2009 Screenline Report (2010)

## Manhattan as a Transaction-Maximizing Place

A city is a means of maximizing social transactions, and population density “stimulates transactions between individual actors,” (Meier, 1968). The capacity of a city to generate a high volume of transactions during short periods of time is an indicator of its power, influence, and economic vitality<sup>iv</sup>. Amin and Thrift (2002) also identified the dense network of “light institutions” as important components of sustaining the volume of transactional activities in central cities<sup>v</sup>. These light institutions include service providers, whether it be financial, professional, administrative, transportation, information, etc., that are easily accessible for firms and clients. Technology start-ups in Manhattan’s Flatiron District, for example, are within walking distance or

a short subway trip from the financial institutions and advertising and marketing firms that are concentrated in Midtown.

Another institution that serves to organize and incubate transactional activities in central cities is, according to Amin and Thrift (2002), the meeting place. This includes restaurants, hotels, convention centers, cultural institutions, and entertainment venues, and, like service providers, the spatial distribution of these amenities across Manhattan is also characterized by density and accessibility. These are hubs where millions of commuting workers, local residents, and visitors interact with each other, during the day and at night, providing the city with an energy generated from the exchange of ideas and knowledge through social interactions. Manhattan's status as transaction-maximizing place is made possible by its remarkable carrying capacity, its ability to sustain a daily inflow of millions of people who come to the city for a variety of different purposes. These underpinning theories provide the basis for this study of the volume and characteristics of the dynamic population of Manhattan.

### **Manhattan as a City of Diverse Flows**

Manhattan's daytime population is incredibly diverse, with 40% as commuting workers, 38% as local residents, and 20% as visitors, illustrating the mixture of primary uses that the city provides. However, the weeknight population consists of not only the residential population of 1.58 million, but also an additional 550,000 people, who are primarily visitors to the city staying in hotels or enjoying the city's nightlife amenities. The nighttime population is also becoming increasingly mobile during late-night hours, as subway ridership data from the MTA has revealed that late-night, off-peak travel has increased faster than that of any other time of day over the past decade. In addition, weekend subway ridership has just reached its highest level since 1947<sup>vi</sup>.

### **The Challenge for Future Measures of Activity**

A handful of cities such as London, Tokyo, and Osaka have released detailed daytime population data, but they are the exceptions to the norm: few cities have released such estimates to the public. As cities become centers of higher education and health care as well as office and business hubs, we must develop new ways to measure the activities that occur with

them. Clearly, the cities of the 21<sup>st</sup> century will not resemble those of the 19<sup>th</sup> and 20<sup>th</sup> century, and it is essential to recognize the need for new methods to understand the vital functions and number of people who rely on cities, even if they neither live nor work there.

## **Methodology**

The method of developing these daytime population estimates required the following assumptions, definitions, considerations, and conditions:

### **Commuters and Local Residents:**

1. Calculations of the upper estimate of daytime population assumed that all workers commute to work during a typical work day.
2. Local residents do not leave Manhattan during the day except those who commute to jobs elsewhere.
3. The Bureau of Labor Statistics' American Time Use Survey data revealed that 35% of Americans work at least one day on the weekend; this percentage was used to estimate the number of commuting workers during a typical weekend day.
4. 2005-09 American Community Survey estimates from the U.S. Census Bureau revealed that 1.1% of Manhattan workers arrived at work between 12:00 am and 5:00 am. These were classified as "night-shift" workers, and were used to estimate the number of commuting workers in the night population.
5. The number of commuters and local residents per day of the week was developed based on the percent of Americans who responded that they commuted to work by a given of the day of the week (2008 Survey of Income and Program Participation).

### **Visitors:**

The total number of visitors was the most challenging to estimate due to limited data and information on their characteristics. Currently, NYC & Company estimates that in 2010, there were 40.8 million tourists to Manhattan. However, this excludes day-trip visitors living within a 50-mile radius of Manhattan who do not stay overnight. Currently, there is no reliable or precise measure of the number of day-trip visitors per year to New York City.

1. Upper estimates were based on the number of NYC & Company-defined visitors during peak season, and the number of day-trip visitors.

2. According to NYC & Company definitions, all “tourists” are overnight visitors or day-trip visitors who do not live within a 50-mile radius of Manhattan. NYC & Company also estimates that international visitors stay 7.3 days, on average, in New York City, and that domestic visitors stay 2.7 days on average, amounting to 148 million total person-days in 2010 among Manhattan visitors. That number was divided by 365 to determine the total number of NYC & Company-defined visitors per day in Manhattan, classified as “out-of-town visitors.”
3. The number of day-trip visitors was estimated to be 374,223, based on an Audience Research & Analysis study of New York City’s \$9 billion nightlife industry. Their study revealed that 77% of non-Manhattan resident nightlife attendees in 2004 were day-trippers from the outer boroughs and suburbs, and 23% were NYC & Company tourists from beyond the metropolitan region. Using this metric, the number of day-trip visitors was assumed to be, at most, 3.1 times greater than the number of NYC & Company-defined visitors.
4. The proportion of day-trip visitors and out-of-towners among all Manhattan visitors is likely to fluctuate during the year. Also, different attractions draw different types of audiences. The Broadway League estimates that only 30% of its theatre attendees were day-trippers, while 70% were NYC & Company tourists. However, since this study aims to provide an upper estimate of Manhattan’s daytime population, it will assume that up to 77% of leisure visitors to Manhattan are day-trippers from within a 50-mile radius of Manhattan.
5. The number of night-trip visitors was based on an estimate of the percent of non-Manhattan resident nightlife attendees who live in the outer boroughs and suburbs. For calculations of the upper estimate, the study assumed that night-trip visitors do not stay overnight, and thus are not counted as a NYC & Company-defined visitor.
6. The number of visitors in Manhattan was assumed to be evenly distributed by day of the week, due to data limitations.

**College Students, Hospital Patients, etc.:**

This study also developed an upper estimate of the number of hospital patients in Manhattan and college students, who attend classes in Manhattan universities, yet do not live in Manhattan.

1. It was assumed that each hospital bed can hold one person, and each outpatient procedure conducted at a hospital during the year was for an individual person.
2. At the upper estimate, all beds are filled to capacity and 75% of beds and outpatient procedures are for non-Manhattan residents
3. All individuals undergoing outpatient procedures leave the hospital and Manhattan during the night. The number of outpatient procedures is constant for all days during the year.
4. All individuals undergoing outpatient procedures or overnight stays at hospitals were assumed to be accompanied by one other individual.
5. Commuter students are defined as those living in off-campus residences outside Manhattan.
6. The proportion of commuting students who do not live in Manhattan was assumed to be 41% at the upper estimate, based on the proportion of NYU students who were classified as "commuter students." These proportions were used to compute the number of commuter students among the 184,000 university students in all of Manhattan's major educational institutions.
7. Commuting workers who do not arrive at work during the "graveyard shift," day-trip visitors who are not nightlife attendees, commuting students, and non-Manhattan residents undergoing outpatient procedures during the day were assumed to be zero for night population estimates.
8. Local residents, overnight visitors, and hospital patients were assumed to be at their residences, hotels, and hospitals during nighttime hours.

## Appendix: Additional Charts and Tables

FIGURE 1

<b><u>Top 10 Daytime Population Increases by County</u></b>	
<b><i>County or Administrative Equivalent</i></b>	<b><i>Increase in Daytime Population</i></b>
<b>1. Manhattan, NY</b>	<b>1,490,000</b>
2. District of Columbia	442,000
3. Fulton (Atlanta, GA)	364,000
4. Dallas, TX	327,000
5. Harris (Houston, TX)	261,000
6. Hennepin (Minneapolis, MN)	221,000
7. Suffolk (Boston, MA)	219,000
8. Cook (Chicago, IL)	212,000
9. King (Seattle, WA)	164,000
10. San Francisco, CA	161,000

Source: 2005-09 American Community Survey, U.S. Census Bureau

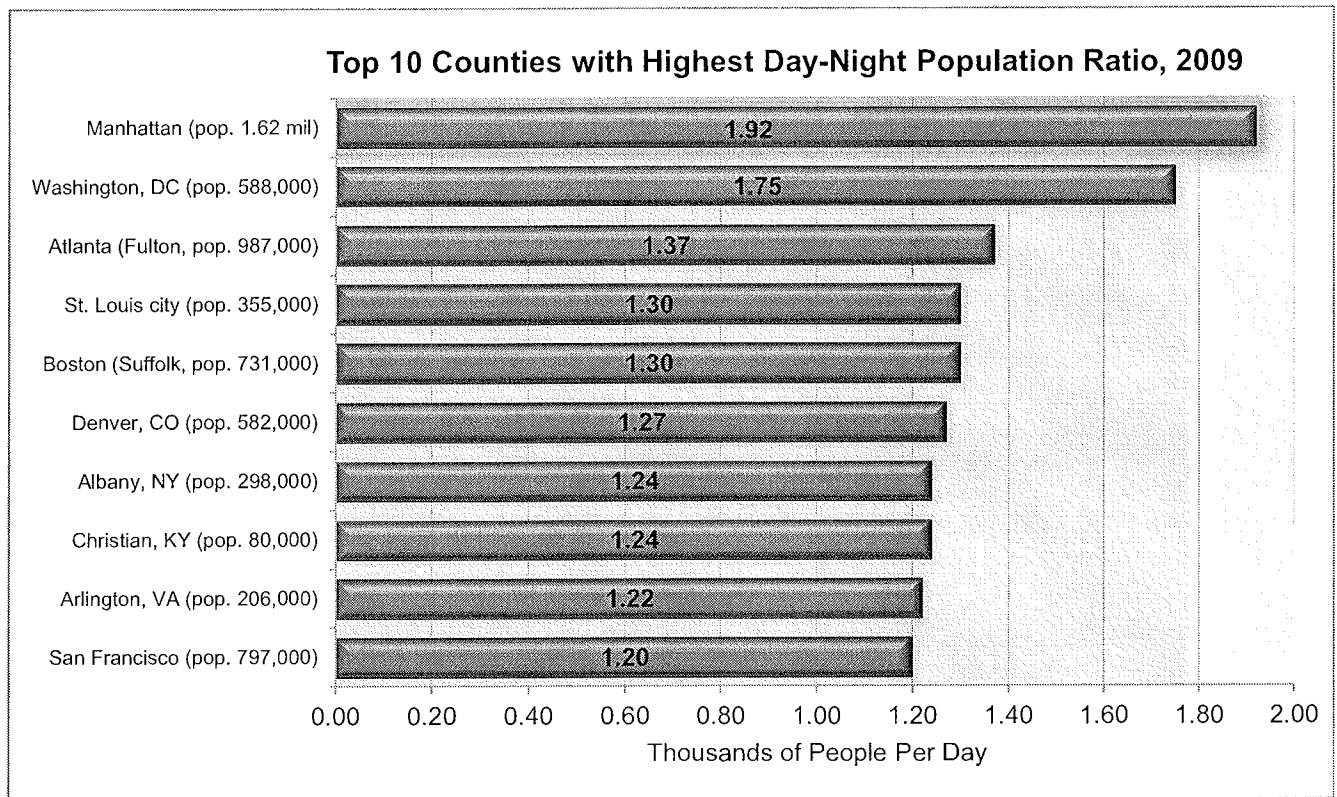
FIGURE 2

<b><u>Top 10 Daytime Population Decreases by County</u></b>	
<b><i>County or Administrative Equivalent</i></b>	<b><i>Decrease in Daytime Population</i></b>
<b>1. Queens, NY</b>	<b>366,000</b>
<b>2. Brooklyn, NY</b>	<b>297,000</b>
<b>3. Bronx, NY</b>	<b>162,000</b>
4. Riverside, CA	132,000
5. Denton, TX (Dallas)	123,000
6. Prince Georges, MD (Washington)	109,000
7. Fort Bend, TX (Houston)	108,000
8. Contra Costa, CA (San Francisco)	96,000
<b>9. Suffolk, NY</b>	<b>93,000</b>
10. Will, IL (Chicago)	91,000

Source: 2005-09 American Community Survey, U.S. Census Bureau



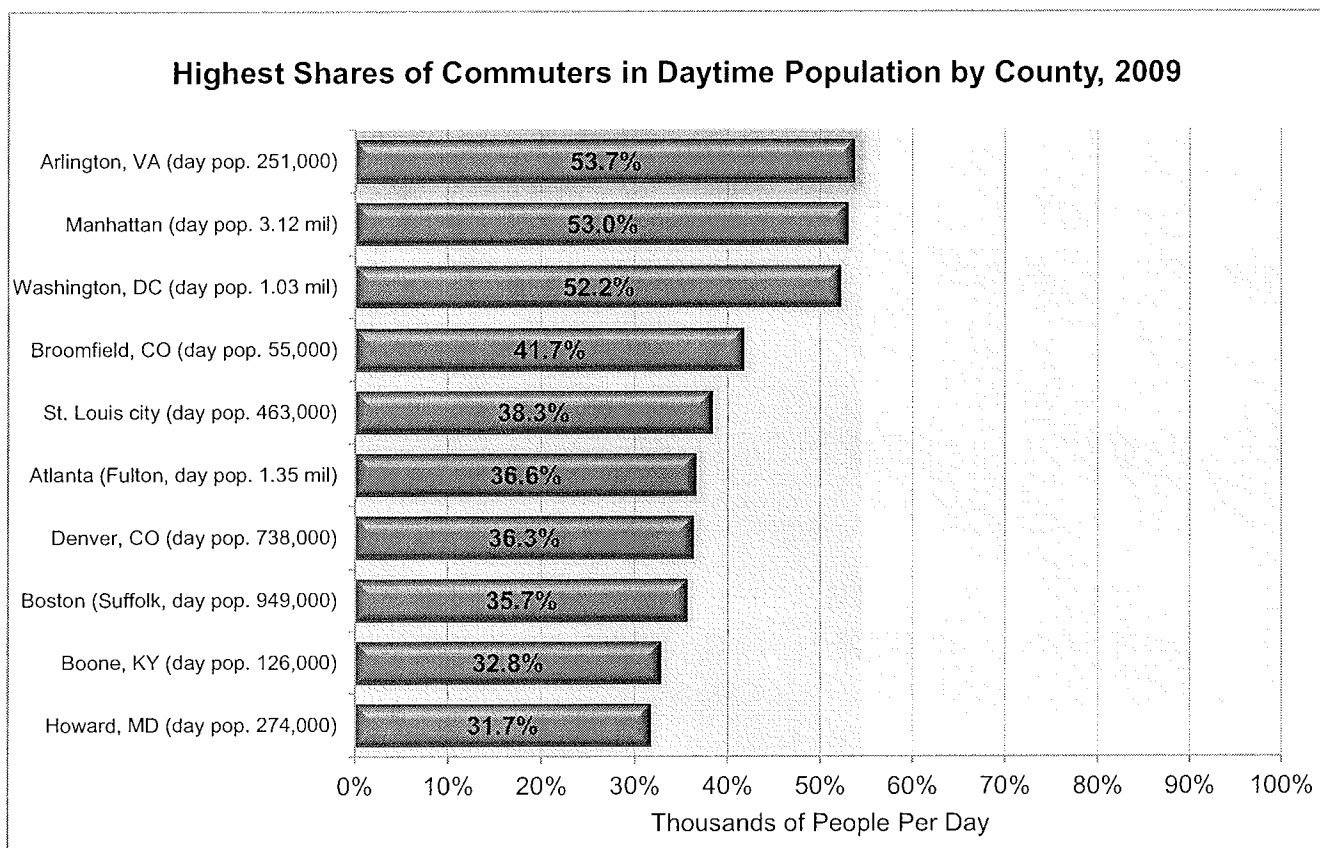
FIGURE 3



NOTE: Population figures on Y-axis represent residential population.

Source: 2005-09 American Community Survey, U.S. Census Bureau

FIGURE 4



NOTE: Population figures on Y-axis represent Census-defined daytime population.

Source: 2005-09 American Community Survey, U.S. Census Bureau

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[http://www.nymtc.org/files/hub\\_bound/Hub\\_Bound\\_Travel\\_Report\\_2007\\_Revised\\_June2009.pdf](http://www.nymtc.org/files/hub_bound/Hub_Bound_Travel_Report_2007_Revised_June2009.pdf)
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Running Head: SECONDARY EFFECTS

**MEASURING THE SECONDARY EFFECTS OF 60/40 BUSINESSES IN NEW YORK CITY:  
A STUDY OF CALLS FOR SERVICE TO THE POLICE**

April 14, 2005

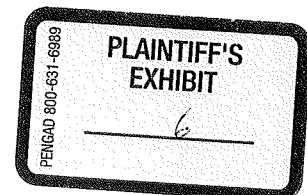
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## **MEASURING THE SECONDARY EFFECTS OF 60/40 BUSINESSES IN NEW YORK CITY: A STUDY OF CALLS FOR SERVICE TO THE POLICE**

### **Introduction and Summary**

In order to test the assumption that New York City may regulate so called “60/40” businesses because they are associated with negative secondary effects, an extensive and detailed empirical study of criminal activity and disorder surrounding these businesses in Manhattan was undertaken utilizing raw data provided by the New York City Police Department (NYPD).

The “60/40” adult business configuration came about as a result of the 1995 amendments to the New York City Zoning Resolution (“1995 Amendments”) which defined an “adult establishment” as any of several different types of businesses which “regularly featured” “adult” entertainment in a “substantial portion” of the premises. When the “substantial portion” element of the statutory definition was challenged as unconstitutionally “vague,” the City of New York authoritatively clarified the term to mean “forty percent or more” of the “customer accessible floor area” used for “adult” entertainment.

The court challenges to the 1995 Amendments were concluded and the statute began to be enforced in mid-1998. Many of the then-existing (and subsequently some new) businesses configured their premises so as to limit the areas devoted to “adult” entertainment to less than forty percent (<40%) of the relevant floor area in order to avoid being classified as an “adult establishment” subject to the new zoning rules. These businesses became known as “60/40” businesses, meaning that they were conforming to the new zoning by devoting <40% of their floor space to “adult” business. This form of business had never previously existed in New York.

After the New York courts upheld these businesses’ contention that they were not “adult establishments” under the 1995 Amendments, the City of New York enacted a new round of

amendments to the Zoning Resolution in 2001 (“2001 Amendments”) which, among other things, eliminated the “substantial portion” test for “adult eating or drinking establishments” (one of the types of businesses included in the definition of “adult establishment”).

The City of New York justified the 2001 Amendments as necessary to eliminate or minimize “adverse secondary effects” attributable to those businesses which were not “adult establishments” under the 1995 Amendments because of the “60/40” rule (i.e., because they devoted <40% of their floor space to “adult” activities as defined in the 1995 Amendments). The 2001 Amendments also eliminated the “substantial portion” test from the definition of “adult establishment” as applied to theaters and conditioned, but did not eliminate, the test as it applies to bookstores, video stores. We did not study the “secondary effects” of these types of businesses. However, the City did not undertake any study of the second effects attributable to this new form of business, which had not existed in 1994-1995 (when the 1995 Amendments were considered and enacted) and had not been the subject of study in any other jurisdiction.

Three hypothesis concerning secondary effects are tested in this study using calls for service to the New York City Police within local neighborhoods defined by census blocks. If secondary effects are associated with 60/40 eating or drinking establishments in New York City we would expect the following: 1) The presence of “60/40” eating or drinking establishments in New York will be associated with a higher number of crime incidents reported in localized areas surrounding these businesses compared to the number of crime incidents reported in comparable localized areas that do not contain these businesses; 2) Such businesses will rank among the “hotspots” of crime and disorder in the community in which they are located; and 3) Changes in the presence or absence of these businesses in the community will be associated with increases and decreases in crime. When a business ceases operation crime events should subside; when such a business opens crime events should increase.

To test these hypotheses we first conducted a hierarchical regression analyses wherein the blocks with 60/40 businesses are compared to surrounding blocks that do not contain such businesses while statistically controlling for other neighborhood demographic features related to crime. We then undertook a “hotspot” analysis within the neighborhood where the 60/40 business was located. This focused analysis by specific address allows us to determine if the 60/40 businesses have required special attention from the police or if other addresses in the immediate neighborhood are more often the source of police attention. Finally, we undertook a before-after analysis wherein we examined crime one year before and one year after 60/40 business openings and closings. We compared the crime change or lack thereof before and after the openings and closings.

The regression analyses showed that variables traditionally found to be related to crime by other criminologists were related to the number of calls to the police. The variable measuring the proximity of the 60/40 establishments added no significant explanatory power. The “hotspot” analysis showed that that the 60/40 businesses are a very insignificant source crime of crime events within their neighborhood in New York City. The 60/40 business addresses rarely rise to the level of even ten-percent of crime events in the neighborhood. Several of these businesses cannot be ranked because there are zero crime events at their address. The vast majority of the businesses had very few crime incidents, no matter what the crime category, relative to the rest of the neighborhood. The before-after analyses revealed that changes in the presence or absence of these businesses in the community were not associated with increases and decreases in crime.

These findings, at a minimum, cast substantial doubt on the City’s theory that 60/40 businesses or the nature of their entertainment is significantly associated with crime events in a neighborhood.

**MEASURING THE SECONDARY EFFECTS OF 60/40 BUSINESSES IN NEW YORK CITY: A STUDY OF CALLS FOR SERVICE TO THE POLICE**

THE SUPREME COURT AND THE ASSUMPTION  
OF NEGATIVE SECONDARY EFFECTS OF  
ADULT BUSINESSES

Since 1976, the United States Supreme Court has decided a series of cases focusing on whether the Free Speech clause of the First Amendment allows cities and states to enact legislation controlling the location of “sexually oriented” businesses (*See e.g., Young v. American Mini Theatres, Inc.*, 427 U.S. 50 (1976); *City of Renton v Playtime Theatres Inc.*, 475 U.S. 41 (1986)).<sup>1</sup> “Zoning” regulations, laws or ordinances that prevent a sex-related business from operating within certain defined areas and/or within a certain number of feet of so-called “sensitive” locations (e.g., residential neighborhoods, schools, houses of worship and/or other “adult establishments”) have been predicated on the notion that municipalities have a substantial interest in combating so-called “negative secondary effects” on the neighborhoods surrounding exotic dance businesses. These secondary effects are generally said to include alleged increases in crime, decreases in property values, and other indicators of neighborhood deterioration in the area surrounding the adult establishment. Typically, communities have either conducted their own investigations of possible secondary effects or have relied on studies conducted by other cities or localities.

The rationale for the secondary effects doctrine was most completely laid out in Renton v. Playtime Theatres, Inc., in 1986. In Renton, the Supreme Court considered the validity of a Renton municipal ordinance that prohibited any “x-rated” theater from locating within 1,000 feet of any residential zone, family dwelling, church, park or school. The Court’s analysis of the ordinance proceeded in three steps. First, the Court found that the Renton ordinance did not ban such theaters

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<sup>1</sup> The terms “adult” and “sexually oriented” business are often used interchangeably. However, in this paper, we limit the use of the term “adult” due to the definitional issues under the New York City Zoning Resolution.



altogether, but merely required that they be a certain distance from sensitive locations. The ordinance, the Court said, was properly considered to be a “time, place and manner” regulation. The Court next considered whether the ordinance was “content-neutral” or “content-based.” If the regulation were content-based, it would be considered presumptively invalid and subject to the “strict scrutiny” standard of judicial review. The Court held, however, that the ordinance was not aimed at the content of the films shown at such theaters, but rather at the secondary effects of such theaters on the surrounding community, namely at crime rates, property values, and the quality of the city’s neighborhoods. Given this finding, the Court stated that the ordinance would be upheld so long as the city of Renton showed that its ordinance was designed to serve a substantial government interest such as a reducing crime rates or maintaining property values.

Most recently (2002), a plurality of the Supreme Court (Justice O’Connor joined by the Chief Justice, Justice Scalia and Justice Thomas) added an important methodological caveat concerning the evidence necessary to validate the assumption that sexually-oriented businesses cause secondary effects. The Court warned in City of Los Angeles v. Alameda Books, et al. that:

This is not to say that a municipality can get away with shoddy data or reasoning. The municipality’s evidence must fairly support its rationale for its ordinance. If plaintiff’s fail to cast direct doubt on this rationale, either by demonstrating that the municipality’s evidence does not support its rationale or by furnishing evidence that disputes the municipality’s factual findings, the municipality meets the Renton standard. If plaintiffs succeed in casting doubt on a municipality’s rationale in either manner, the burden shifts back to the municipality to supplement the record with evidence renewing support for a theory that justifies its ordinance.

Given the conclusions of the other Justices in Alameda Books that special zoning of sexually oriented establishments is either “content-based” (Justice Kennedy) or “content-correlative” (Justices Souter, Steven, Breyer and Ginsburg), and the standards of review articulated by them - - in each case imposing a higher burden on municipalities seeking to regulate sexually oriented establishments as such



- - there is no doubt that the entire Court presently agrees with the “no shoddy data or reasoning” standard of Justice O’Connor’s plurality opinion.

#### Methodological Problems With Past Studies – Shoddy Data and/or Reasoning

Past studies claim to have found “crime” in the area surrounding sexually oriented establishments and attributable to their presence in the community, but lack the essential methodological features necessary to validly make such a claim. Paul, Linz and Shafer (2001)<sup>2</sup> found numerous problems among the most frequently cited studies by communities across the United States. For example, the Indianapolis Indiana study (1986) failed to properly match study and control areas on variables; the Phoenix Arizona study (1979) relied on crime data collected for only a one-year period; and the Los Angeles study (1977) authors admitted that the police stepped up surveillance of sexually oriented businesses during the study period. Each of these methodological problems severely limits the utility of these studies.

The New York Studies. Studies of secondary effects of pre-60/40 era “adult” businesses in New York City are even more problematic. Two studies have been conducted in New York City. These studies do not conclude that negative secondary effects exist for these businesses, yet they have often been cited as evidence for such effects.

The 1994 Times Square Business Improvement District (TSBID) study conducted by the consulting firm Insight Associates combined analysis of available data on property values and incidence of crime with a demographic and commercial profile of the area to attempt to show relationships between the concentration of “adult-use” establishments and negative impacts on

<sup>2</sup> Paul, B., Linz, D. & Shafer, B.J. (2001). Government regulation of adult businesses through zoning and anti-nudity ordinances: Debunking the legal myth of negative secondary effects. Communication Law and Policy, 6, 2, 355-391. (“Paul I”). This study was noted as one of the “top three refereed papers” of 2000-01 by the International Communication Association and was expressly called to the attention of the Supreme Court in Alameda Books in an amicus brief filed by the First Amendment Lawyers Association (which, in turn, was pointedly referred to by Justice Souter in two footnotes to his dissenting opinion), and is generally regarded as the catalyst for the “no shoddy data or reasoning” rule articulated by the plurality.

businesses and community life. The Times Square Business Improvement District also collected data for property values for the 1985/86 and 1993/94 years. There was a vast array of businesses that may be considered "adult" in this study (but none of the 60/40 ilk, which did not then exist). These included video and bookstores, motels, massage parlors, sex clubs, topless and bottomless or nude bars (not all of which serve alcohol), and peep shows.

Anecdotal evidence from property owners, businesses, community residents and others regarding public perceptions of the impact of sexually oriented businesses on their neighborhoods suggested there were problems. They complained of the increase of such establishments on Eighth Avenue. Some data from before the then-recent increase in sexually oriented businesses was unobtainable, and the study thus could not show if there had been an increase in actual complaints corresponding to the proliferation of pre-60/40 "adult establishments".

Methodologically speaking, the New York Times Square Business Improvement District Study failed to properly match control and test (adult) areas in order to insure reliable comparisons between the two for either crime rates or property values. In order to insure that accurate and fair comparisons are being considered, a control or comparison area must be selected that is truly "equivalent" to the area(s) containing the sexually oriented business(es). This lack of methodological reliability prevents the reader from drawing reliable conclusions.

Perhaps because of these methodological deficits, the study authors Insight Associates themselves concluded:

...while it may be that the concentration of adult use establishments has a generally depressive effect on adjacent properties...we do not have sufficient data to prove or disprove this thesis.  
[Emphasis added.]

This conclusion by Insight Associates was expressly quoted at page 41 of the “Adult Entertainment Study” also conducted in 1994, by the NYC Department of City Planning (“DCP Study,” which we discuss below).

In the section entitled: “General Crime Statistics,” the conclusions of Insight Associates were:

One cannot assert that there is a direct correlation between these statistics and the concentration of adult use establishments on 42nd Street between Seventh and Eighth Avenue[s], or along Eighth Avenue between 45th and 48th Streets. But there is very definitely a pointed difference in the number of crime complaints between these study blocks and their controls. [TSBID Study, pg. 32.]

What can be fairly said about the TSBID Study? The authors of this study admit in their own summary of property value and crime activity analyses that they could find no adverse secondary effects for sexually oriented businesses.

An additional study was performed in 1994 was the DCP Study by New York City’s Department of City Planning (“DCP”). The DCP reviewed studies and ordinances from other localities and studied the industry as it existed in New York City—among other things, meeting with members of the sexually oriented business industry. The DCP reviewed accounts of secondary effects from sources as diverse as the City Planning Commission, the Office of Midtown Enforcement, the Chelsea Business Survey, the Task Force on the Regulation of Sex Related Businesses, the Times Square Business Improvement District Study, and a number of newspaper reports and correspondence from citizens. DCP examined signage and neighborhood conditions in six study areas containing sexually oriented businesses, also surveying local organizations, businesses, police officers, real estate brokers, and sanitation department officials in each of the six areas. It also comparatively analyzed

criminal complaints and assessed property values in the study areas and in control areas without sexually oriented businesses.

It found that between 1984 and 1993 the number of sexually oriented businesses in New York City increased from 131 to 177. The DCP found that sexually oriented businesses tend to cluster, especially in central areas and along major vehicular routes connecting central business districts with outlying city areas and suburbs. However, crime report statistics in New York City did not show higher crime rates in areas with sexually oriented businesses than in areas without them, but property values in proximity to sex businesses grew at an appreciably slower rate than in areas away from such businesses. The DCP found widespread fear of sexually oriented businesses' secondary effects on the part of the citizenry, and also found that survey respondents indicating that their businesses or neighborhoods had not suffered adverse secondary effects tended to be the ones living in areas with isolated sex businesses. Real estate brokers overwhelmingly reported that sexually oriented businesses would have negative effects on surrounding property values.

The DCP Study authors admit: "Crime report statistics in New York City did not show higher crime rates in areas with sexually oriented businesses than in areas without them..." (Emphasis added.) Regarding crime the study reports:

The community liaison or beat officer was interviewed for each of the six study areas. When the survey and control block fronts were compared for criminal complaints and allegations, the officers generally did not link higher incidents with adult uses. Three officers believed that criminal allegations are higher on the survey block fronts compared to the control block fronts but, in two of these cases, they attributed the higher incidence of allegations to uses unrelated to the adult use. In a single instance, an officer replied that the adult entertainment establishment located in the study area has some effect on crime, and then "only rarely." Four of the six officers thought the adult uses have no effect on crime. One officer stated that if more adult entertainment establishments were to locate in the study area, crime probably would increase. However, that officer and another responded that more bars, movies or theaters, or video/bookstores of

any kind would effectively increase crime in the study area. [DCP Study, pg.53.]

The Police Department provided the Department of City Planning with information about criminal complaints drawn from precinct files [DCP Study, pg 55]. Once these data had been analyzed the Study authors concluded:

In summary, it was not possible to draw definitive conclusions from the analysis of criminal complaints. Land uses other than adult entertainment establishments, e.g., subway station access, appear to have a far stronger relationship to criminal complaints. It was not possible to isolate the impact of adult uses relative to criminal complaints. [DCP Study, pg 57.]

The Department of City Planning Study reached the following conclusion:

The analysis of trends in assessed valuation relative to adult entertainment was inconclusive. It would appear that if adult entertainment uses have negative impacts, they are overwhelmed by other forces that increased property values, at least as measured by assessed values. Even at the small scale of the survey block front, there is a wide diversity in the assessed value trends ranging from an increase of more than 18 percent to an increase of more than 200 percent over the period of analysis, strongly suggesting the importance of other factors. The influences on assessed value that the city's assessors take into account are numerous and include the sale prices of similar comparable properties adjusted for differences in size, age, and location. While the total assessed values on the survey block fronts may be influenced to some extent by the presence of adult entertainment uses, demonstrating such effects is very difficult. [DCP Study, pg 57.]

Therefore, it is reasonable to conclude that the Department of City Planning Study finds no direct evidence of the adverse secondary effect of decreased property values caused by Adult Uses. The same may be said of crime effects. The City drew the following findings and conclusions:

The analysis of criminal complaint data and property assessed valuation data was less conclusive than the surveys. Regarding criminal complaints, it appears that land uses other than adult entertainment establishments, e.g. subway station access, have a far

stronger relationship to criminal complaints. It was not possible to isolate the impacts of adult uses relative to criminal complaints. \*\*\*

Comparisons of percentage changes in assessed valuations between 1986 to 1992 [*sic*] for the study areas, survey and control block fronts, community district, and borough, did not reveal any significant relationship. It would appear that the negative impacts of adult entertainment uses on property values that were found in other studies were overwhelmed by forces that increased property values overall, at least as measured by assessed values. \*\*\*

In some cases, particularly in study areas with only one adult entertainment establishment, the DCP survey did not yield conclusive evidence of a direct relationship between the adult use and the urban ills affecting the community. \*\*\* [DCP Study, pg 65].

In summary, what can fairly be said about the New York City Department of City Planning is that it found no empirical evidence of adverse secondary effects of Adult Uses.

#### Recent Empirical Studies in Other Cities Also Show No Adverse Secondary Effects of Adult Cabarets

Recently, we have conducted independent, reliable studies using census data and modern analytical techniques to examine whether sexually oriented business facilities engender negative secondary effects. Unlike many of the previous studies these studies do not suffer from the basic methodological flaws we enumerate in *Paul I*.

The first of these studies is an examination of adult cabarets in the City of Ft. Wayne, Indiana, which serve alcoholic beverages and provide exotic entertainment (Paul and Linz, 2002).<sup>3</sup> This study was noted as one of the “top four refereed papers” of 2002-03 by the International Communication Association and also recently received the “Top Student Paper” award from the United States Department of Justice and thus has been vetted for its methodological soundness. Unlike previous studies, conducted in other municipalities, specific attention was given to developing an empirical approach that fulfilled the requirements set out by the Supreme Court for the proper conduct of a social

<sup>3</sup> Paul, B. & Linz, D. (2002). Testing Assumptions Made by the Supreme Court Concerning the Negative Secondary Effects of Adult Businesses: A Quasi-Experimental Approach to a First Amendment Issue. (*Paul II*). This paper was presented at the 2002 International Communication Association, Acapulco, Mexico.

scientific inquiry. A 1000 feet circumference surrounding each of eight exotic dance nightclubs in Fort Wayne was established. Comparison areas were selected in the city of Fort Wayne and matched to the club areas on the basis of demographic features associated with crime and commercial property composition. The number of calls to the police from 1997-2000 in the areas surrounding the exotic dance nightclubs was compared to the number of calls found in the matched comparison areas.

The analysis showed little difference, overall, between the total number of calls to the police reported in the areas containing the exotic dance nightclubs and the total number of offenses reported in the comparison areas. We concluded there was little evidence of adverse secondary effects in the form of crime incidents in the City of Fort Wayne.

More recently, we conducted a study that sought to determine if a relationship exists between “adult” erotic dance clubs in Charlotte, North Carolina and negative secondary effects in the form of increased numbers of crimes reported in the areas surrounding the adult businesses (Linz, Land, Williams, Paul & Ezell, 2004).<sup>4</sup> This study was conducted jointly by researchers at the University of California at Santa Barbara and Duke University and is the only peer-reviewed published study of the secondary effects of adult businesses. For each of 20 businesses, a control site (matched on the basis of demographic characteristics related to crime risk) is compared for crime events over the period of three years (1998-2000) using data on crime incidents reported to the police. We find that the presence of an “adult nightclub” does not increase the number of crime incidents reported in localized areas surrounding the club (defined by circular areas with 500 and 1,000 feet radii) as compared to the number of crime incidents reported in comparable localized areas that do not contain such a sexually oriented business. Indeed, the analyses imply the opposite, namely, that the nearby areas surrounding the

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<sup>4</sup> Linz, D., Land, K., Williams, J. Paul, B. & Ezell, M. (2004). An Examination of the Assumption that Adult businesses are Associated with Crime in Surrounding Areas: A Secondary Effects Study in Charlotte, North Carolina. Law and Society Review, Volume 38, Number 1, pp 69-104.

sexually oriented business sites have smaller numbers of reported crime incidents than do corresponding areas surrounding the three control sites studied.

We have also examined whether rates of crime are associated with the presence of “adult cabarets” in the 67 counties of Florida once other variables related to crime are controlled.<sup>5</sup> Three types of crime were examined in this study: UCR property crimes, UCR violent crimes, and rape.<sup>6</sup> A measure was also constructed for the numbers of non-sexually oriented adult businesses: bars, gambling establishments, and hotels and motels. These two measures, along with measures of social disorganization and demographic variables, were examined for their relative ability to predict the three rates of crime. One set of regression analyses used measures of sexually oriented businesses, both nude and partially-nude, based on absolute numbers. In subsequent analyses these measures were based on rates per 100K population or on spatial densities. Across all three analyses, measures of nude or semi-nude businesses were consistently unrelated to crime rates when other variables were taken into account. By contrast, measures of non-sexually oriented adult businesses showed strong relationships with property crimes and moderate relationships with violent crimes. These results are consistent with previous research using different methodologies and they support the predictions of routine activity theory. However, they cast doubt upon the validity of the doctrine of the adverse secondary effects of businesses offering nude or semi-nude entertainment.

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<sup>5</sup> Fisher, R., Linz, D., Benton, C., & Paul, B. Examining the Link Between Sexual Entertainment and Crime: The Presence of Adult Businesses and the Prediction of Crime Rates in Florida. Drs. Fisher is a member of the Department of Psychology of the University of Central Florida. One version of this paper was presented to the Communication Law and Policy Division at the 2004 annual meeting of the International Communication Association: New Orleans, LA and another version was presented to the 2004 annual meeting of the Southeastern Psychological Association in Atlanta, GA. Another version of this paper entitled: “Nude entertainment and rates of crime: An analysis by counties” by Randy D. Fisher, Charles Benton, and Jeanne L. Weaver of was presented at the 50<sup>th</sup> annual meeting of the Southeastern Psychological Association, Atlanta, GA, March 11, 2004. This version of the paper received an “Outstanding Professional Paper Award” from the Southern Psychological Association. Currently, the latest version of this paper is under review at the scientific peer-reviewed journal Law and Human Behavior.

<sup>6</sup> UCR refers to Uniform Crime Reports to the Federal Bureau of Investigation.



Finally, Linz and Mike Yao, of the Department of Communication of the University of California at Santa Barbara, have recently undertaken an investigation of crime rates (and contributing factors to the crime rates) in and around four major Ohio cities--Cleveland, Dayton, Toledo and Columbus. This study showed a lack of correlation between the presence of liquor-serving establishments featuring nude or partially nude dancing and crime. Hierarchical regression analysis in Toledo revealed that the presence or absence of "adult cabarets" in a given neighborhood did nothing to explain the presence of crime in that same neighborhood. Similarly, in Columbus, the addition of alcohol serving "adult cabarets" as a factor in our analysis resulted in approximately zero explanatory power. The work in Dayton revealed a negative correlation between "adult cabarets" and incidents of rape, such that the presence of an alcohol-serving adult entertainment establishment is actually indicative of less rather than more rape events. Finally, in Cleveland, we found that the addition of alcohol serving "adult cabarets" as a factor in his analysis also added "no ability to explain crime incidents. We suggest that the negative correlation between "adult establishments" and violent crime might be explained by the fact that in alcohol serving establishments that do not feature sexually oriented entertainment, people fight with one another particularly men over women. None of that exists in an "adult" entertainment venue. This study has been introduced as testimony in United States District Court for the Northern District of Ohio, Eastern Division in the case: J.L. Spoons, Inc., et al., v. Kenneth Morckel, et al. 314 F Supp. 2nd 746, ND Ohio, April 1, 2004. In this case the court noted:

Dr. Linz's study shows a lack of correlation between the presence of liquor-serving establishments featuring nude or semi-nude dancing and the types of crime the State seeks to reduce. (See Transcript of March 12 Hearing, at 25-56). In Toledo, Dr. Linz's hierarchical regression analysis revealed that the presence or absence of adult cabarets in a given neighborhood did approximately nothing to explain the presence of crime in that same neighborhood. Transcript of March 12 Hearing at 39, 45-46. Similarly, in Columbus, the addition of "alcohol-serving adult cabarets" as a factor in Dr. Linz's analysis resulted in approximately "zero explanatory power." Transcript of March 12

Hearing at 46. In Dayton, Dr. Linz's work revealed a negative correlation between adult cabarets and incidents of rape, such that "the presence of [an alcohol-serving adult entertainment] establishment is actually indicative of less rather than more rape events." Transcript of March 12 Hearing at 52. Finally, in Cleveland, Dr. Linz found that the addition of "alcohol-serving adult cabarets" as a factor in his analysis also added "no ability to [explain] crime incidents." Transcript of March 12 Hearing at 54. The Court is uncertain to what extent the Supreme Court would advocate that we simply approve the State's reliance on "propositions ... well established in common experience and ... zoning policies that we have already examined," *Alameda Books*, 535 U.S. at 453, and ignore the implications of more persuasive, if counterintuitive, evidence like Dr. Linz's study. Clearer guidance in this area would greatly aid the Court in determining whether the club owners have established a strong likelihood of success on a claim that no restriction on nudity could possibly further the State's interest in reducing secondary effects.

### The Present Study

The purpose of the present study is to conduct the type of empirical study in New York City designed to avoid the collection of "shoddy data" and the use of (shoddy) "reasoning" as demanded in *Alameda Books*, in order to determine if a relationship exists between (a) eating and drinking establishments that feature adult entertainment in less than forty percent (40%) of the customer accessible floor area (referred to as "60/40" businesses) and (b) negative secondary effects. Further, this evidence is obtained in accordance with established methodological procedures so as to insure a high level of scientific reliability and admissibility in a Federal court.

Hypotheses to be tested. Three hypotheses concerning secondary effects are tested in this study, using calls for service to the New York City Police within local neighborhoods defined by census blocks. If secondary effects are associated with 60/40 eating or drinking establishments in New York City, we would expect the following: 1) The presence of "60/40" eating or drinking establishments in New York City will be associated with a higher number of crime incidents reported in localized areas surrounding these businesses compared to the number of crime incidents reported in comparable

localized areas that do not contain these businesses; 2) Such businesses will rank among the “hotspots” of crime and disorder in the community in which they located; and 3) Changes in the presence or absence of these businesses in the community will be associated with increases and decreases in crime. When a sexually oriented business ceases operation, crime events should subside; when such a business opens, crime events should increase.

Analysis strategy. To test these hypotheses we first conduct regression analyses wherein the blocks with 60/40 clubs are compared to surrounding blocks that do not contain such businesses, while statistically controlling for demographic features of the blocks that are known to be related to crime. The methodological approach taken here also involves two additional analyses. We undertake a “hotspot” analysis within the neighborhood where the sexually oriented 60/40 business is located. This focused analysis, by specific address, allows us to determine if such businesses have required special attention from the police or if other addresses in the immediate neighborhood are more often the source of police attention than similar locations on comparable blocks. Finally, we undertake a before-after analysis wherein we examined crime one year before and one year after sexually oriented 60/40 business openings and closings. We compare the crime change or lack thereof before and after the openings and closings.

## METHOD

### Overview

The following procedures were utilized in the present study. We obtained a list of 60/40 eating or drinking establishments from the City of New York. We plotted the 60/40 businesses using geographic mapping software. This geo-mapping software was then used to locate census blocks within which the 60/40 businesses were located (“target” blocks) and surrounding census blocks. We then obtained block-level census demographic information for each of the target and surrounding blocks.

Crime and disorder incidents were then plotted and aggregated by census blocks. Analyses were then performed using these census blocks and crime incident counts within each.

#### Locating the 60/40 Businesses with Geographic Mapping Software

A list of 60/40 eating or drinking establishments in New York City by address was obtained from the City of New York. The list, entitled: “Adult Establishments, 2000,” was prepared for the March 26, 2001 Report to the City Planning Commission. As the report indicates, the number and locations of 60/40 establishments as of any given date may vary slightly from the information presented in the report, and the list was not intended to be used officially or to be relied upon for regulatory or enforcement purposes. The irony of such a disclaimer is patent. However, that being said, this list - - whatever its limitations - - represents New York City’s best judgment as to where the 60/40 businesses are located at the time of the study.

The following 60/40 eating or drinking establishments were examined in the present study. The list of businesses was grouped according to three criteria: a) 60/40 businesses open throughout the entire study period of 1998 to June 2002; b) businesses opening, closing, or changing entertainment formats between January 1998 and June 2002; and c) businesses that were listed by the City of New York as 60/40 businesses for which we could not obtain information concerning openings, closings or change in status as 60/40 uses.

#### **60/40 Businesses Open Throughout the Period of 1998 to June 2002**

<b>Business Name</b>	<b>Address</b>
Pussycat Lounge	96 Greenwich St.
NY Dolls	59 Murray St.
Baby Doll Lounge	34 White St.
VIP Club	20 W. 20th St.
Tens	35 E. 21st St.
Private Eyes	320 W. 45th St.
Lace	725 7th Ave.
Bare Elegance	216 W. 50th St.
Scores	333 E. 60th St.
Vixen	60-07 Metropolitan Ave.

Wiggles	96-24 Queens Blvd.
Cozy Cabin	92-03 Astoria Blvd.
Goldfingers	92-77 Queens Blvd.
Port O'Call	93-10 Woodhaven Blvd.
Al's Mr. Wedge	673 Hunts Point Ave.

### Businesses Opening, Closing, Changing Format Between January 1998 and June 2002

Business Name	Address	Change
Billy's Topless	729 Avenue of the Americas	no longer topless in 01
Club 44	689 8th Ave.	opened in October of 2001
Gallaghers	39-33 Queens Blvd.	closed in mid 2000
Gallaghers 2000	43-19 37th street	opened in end of 2000
Wiggles	96-24 Queens Blvd.	1993
Cozy Cabin	92-03 Astoria Blvd.	pre 98
Goldfingers	92-77 Queens Blvd.	pre 98
Candlewood Inn new address	32-17 College Point Blvd.	opened in 2000
Candlewood Inn old address	41-57 College Point Blvd.	closed in 2000

### Businesses that were listed by the City of New York but that could not be contacted (2004) to determine change in status as 60/40 uses.

Business Name	Address	Confirmation Status
Sidebar	45-08 Vernon Blvd.	Could not determine change in status
Foxes	32-37 Greenpoint Ave.	Could not determine change in status
New York Style Eats	45-02 Queens Blvd.	Could not determine change in status
Honey's	49-14 Queens Blvd.	Could not determine change in status
Nickels	69-20 Queens Blvd.	Could not determine change in status
Ilada's II	81-26 Baxter Ave.	Could not determine change in status
Fiddle & Bow	92-07 Roosevelt Ave.	Could not determine change in status
Johnny Jays	112-08 Astoria Blvd.	Could not determine change in status
Café Europa	94-02 Sutphin Blvd.	Could not determine change in status
Devine Club	611 E. 133rd St.	Could not determine change in status
Stacy's	1098 Lafayette Ave.	Could not determine change in status
El Coche	910 Hunts Point Ave.	Could not determine change in status
Vibrations	20-31 129th St.	Could not determine change in status
Juniors	1625 E. 233rd St.	Could not determine change in status

The standard geographic information system computer program known as "Mapitude," produced by the Caliper Corporation, of Newtown, MA, was then used to locate the Census Block, Census Block Group and Census Tract within which each 60/40 business was located.

Using Census Blocks and Block Groups within Tracts for Analyses

The U.S. Census Bureau keeps track of geographic boundaries for tabulation purposes. In addition to political boundaries such as states, counties, and cities, the Census Bureau also creates census geography so that census data can be tabulated to smaller units. In this study we utilize the Census Bureau's geographic boundaries. Our units of analysis are census blocks housed within a block group, which is in turn, drawn from within census tracts.

Tracts are a small, relatively permanent statistical subdivision of a county delineated by a local committee of census data users for the purpose of presenting census data. Census tract boundaries normally follow visible features, but may follow governmental unit boundaries and other non-visible features, and they always nest within counties. Census tracts are designed to be relatively homogenous units with respect to population characteristics, economic status, and living conditions at the time the users established them. They usually contain 1,500 to 8,000 people and are made up of on average about four block groups. There are about 66,000 tracts nationwide.

Census Blocks are the smallest entity for which the Census Bureau collects and tabulates census information. There are about 8.5 million blocks nationwide. Block Groups are a combination of census blocks that are adjacent to one another and are also a subdivision of census tracts. Block groups generally contain between 600 and 3000 people and are made up of on average 40 census blocks. There are about 211,000 block groups nationwide. Census block groups in Manhattan are made of considerably fewer blocks than the national average due to the density of the population.

For the present study, 179 Block Groups, made up of 967 Blocks, were included in the analyses. Block groups were included if any of the following conditions were met: a) one or more Blocks in the Block Group contains a 60/40 business, b) one or more blocks containing a 60/40 business directly

touches one or more Blocks in a block group; c) one or more blocks in the Block Group are within 500 feet of a 60/40 business.

#### Using Block Level Census Demographic Information

Using Maptitude, we are also able to include general demographic characteristics of each block in the study as officially measured by the 2000 United States Census. These variables include measures of population, sex, age, race, relationships in household, and household type for each block. These demographic characteristics are used to control for social features in the environment that may co-vary with the frequency of calls to the police.

Several variables that have been investigated by others have been found to be important as predictors of crime activity. These include measures of racial composition, family structure, economic composition, and the presence of motivated offenders including males between the ages of 18 and 25. These variables have been examined on the basis of the theory that a local area's population age structure (especially the presence of young male adults), and its race/ethnic composition can affect both the size of the pool of motivated crime offenders and the presence of suitable targets for predatory crimes.<sup>7</sup>

The demographic variable predictors in the present study included: a) the number of males over the age of 18 in the block, b) the number of African-Americans,<sup>8</sup> c) the number of persons classifying

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<sup>7</sup> Menthe, T. D., & Meier, R. F. (1994). Crime and Its Social Context: Toward an Integrated Theory of Offenders, Victims, and Situations. Albany, NY: State University of New York Press. The use of these variables as demographic variable predictors is also justified by investigations undertaken by sociologists who have examined community traits to explain crime. Janet L. Lauritsen has summarized this research for the Panel on the Understanding and Control of Violence of the National Research Council, National Academy of Sciences. She relies extensively on an article by Sampson, R. J. (1993) entitled: "The community context of violent crime" which appeared in W. J. Wilson (Eds.), (pp. 274-279). Newbury Park, CA: Sage Publications. Pp. 259-67.

<sup>8</sup> We were unable to employ an income measure in the present study due to the fact that these data are available at the census block group level only. We employ the smaller census block as our unit of analysis. We consider the number of African Americans as a surrogate for such an income or poverty measure. Studies uniformly have found much higher rates of violence in predominantly black communities (Block 1979; Messner and Tardiff 1986; Sampson 1985; Roncek 1981; Smith and Jarjoura 1988). However, this effect largely disappears when researchers include other variables related to race (Block 1979). Sampson warns that: "...although percentage black and heterogeneity are strong and pervasive correlates of violent crime rates," "...there is reason to doubt whether racial composition has unique explanatory power." The Southern



themselves as Hispanic, d) the number of households comprised of at least one non-family member, and e) the number of households comprised of only related family members in the block.<sup>9</sup>

One analysis strategy will entail entering these variables into a statistical analysis to control for the effects of these characteristics on calls to the police and then to test the effect of having a 60/40 business in the neighborhood once these other variables are statistically controlled.

### Measuring Crime and Disorder Incidents

The City of New York Police Department provided a CD-ROM disk for each of the years 1998 through 2001, as well as the partial year January 1 through June 2, 2002. These CDs contain a listing of all calls for service across the five boroughs for a particular year. The entire 1999 data set consisted of over 4.5 million individual lines of data, while the 2000 data set included over 5.5 million lines. Each line ideally chronicles an individual incident, whether warranted or unwarranted, for which some sort of police action was taken. We received data from the NYPD for January 1<sup>st</sup> 1998 through June 2<sup>nd</sup> 2002.

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Poverty Law Center (<http://www.splcenter.org/intel/intelreport/article.jsp?>) offers the following summary of criminological research on race and income: "The fundamental conclusion of decades of serious criminology is that crime is intimately related to poverty. In fact, when multivariate statistical methods such as regression analysis are used, study after study has shown that race has little, if any, predictive power. This basic fact is so well understood among scholars of criminal justice that the preface to Minnesota's official crime data reports carries this caveat: 'Racial and ethnic data must be treated with caution. ... Existing research on crime has generally shown that racial or ethnic identity is not predictive of criminal behavior with data which has been controlled for social and economic factors.' When more sophisticated methodology is employed, socioeconomic factors including poverty, education, social status and urban residence account far better for criminal behavior than race. Above all, income counts. It is precisely because being black in America is closely correlated with being poor, suffering from high unemployment and having low levels of education that the black community has relatively high crime rates." In addition, a study using 1960, 1970, and 1980 census data on cities, metropolitan areas, and states found that large, dense populations are associated with high homicide rates when the population is relatively poor, largely black, and has a high percentage of single-parent families (Land, McCall, and Cohen 1990). The increasing concentration of poor blacks in high-crime areas coincides with the deindustrialization of inner cities, according to the National Academy of Sciences summary by Sampson. "Namely, the exodus of middle- and upper income black families from the inner city removes an important social buffer that could deflect the full impact of prolonged joblessness and industrial transformation." When upwardly mobile blacks move to higher socioeconomic neighborhoods the crime-race relationship disappears. Further, it is important to note that crime in black neighborhoods is usually a matter of blacks victimizing other blacks.

<sup>9</sup> We employ measures of unrelated members in the household and household comprised of only family members as indices of family disorder. Many recent studies have reported an important relationship between divorce rates, or the percentage of female-headed households, and rates of violent crime independent of the community's poverty level or racial composition (Block 1979; Roncek 1981; Schuerman and Kobrin 1986; Sampson 1985, 1986). In fact, the relationship between race and crime disappears when family disruption is taken into account (Sampson 1985; Messner and Tardiff 1986; Smith and Jarjoura 1988). "Overall," concludes Sampson, "the correlation of family structure with violence is not simply the result of other factors we typically consider, such as poverty, race, and density. Rather, the effect of family disruption appears to be independent and large."



The total number of incidents for each year were as follows: 1998 - 4,472,686 incidents; 1999 - 5,247,002 incidents; 2000 - 4,883,827 incidents; 2001 - 4,481,471 incidents; 2002 – 2,047,534 incidents (only half the year). The total number of incidents originally considered was 21,132,520.

#### Use of Calls-for-Service (CFS) as a Crime and Disorder Indicator

Criminologists employ a variety of measures of crime. Each measure has unique advantages and disadvantages. All measures have error associated with them and may be biased to one degree or another. Many criminologists have employed an indicator of crime using records of citizen's telephone calls for service to police dispatch centers to measure the relative frequency of crime at the level of the individual address (Sherman et al., 1989), the neighborhood (Bursik et al., 1990; Warner and Pierce, 1993) and the municipality viewed as a whole (Bursik and Grasmick, 1993).

According to its proponents, the calls-for-service (CFS) measure offers a more valid description of aggregate levels of crime than either police records collated in the FBI's Uniform Crime Reports (UCR) or victimization data collected in the National Crime Survey.<sup>10</sup> This is so because at least two factors contribute to measurement bias in UCR data: citizen's decisions about whether to notify the police about criminal activity, and police decisions about whether to take (i.e., record) reports when citizens inform them that crimes have occurred (e.g., Black, 1970).

Further, UCRs have additional problems which prevent them from being the only acceptable means of measuring crime. Several of these problems are enumerated by the Wisconsin Office of Justice Assistance (WOJA) Statistical Analysis Center (May, 2004).<sup>11</sup> According to WOJA, since the

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<sup>10</sup> Sources of bias in victimization data include, but are not limited to, citizens' failure to report crimes to interviewers, as well as other problems that are common to survey research; for example, errors associated with interviewer effects and other response biases (e.g., Bailey et al., 1978; Biderman and Lynch, 1991). Advocates of CFS as measures of crime reason that CFS are more valid than victimization crime counts because they are not subject to response or memory problems inherent in surveys.

<sup>11</sup> The Wisconsin Statistical Analysis Center is a program of the Wisconsin Office of Justice Assistance. The Center collects, analyzes, interprets and disseminates criminal justice data in Wisconsin. It operates the State's Uniform Crime Reporting

establishment of the Uniform Crime Reporting (UCR) Program in 1930, the volume, diversity, and complexity of crime has steadily increased while the UCR Program has remained virtually unchanged. This is such a severe problem that WOJA is working with police and other law enforcement agencies across the state to eliminate reliance on this flawed system of crime reporting.

In the traditional UCR system, law enforcement agencies tally the number of occurrences of Part I offenses, as well as arrest data for both Part I and Part II offenses, and submit aggregate counts of the collected data in monthly summary reports to the State. The problem is that there is no requirement to tie arrests and exceptional clearances back to previously submitted incident reports. Therefore, the traditional UCR Program can be described as a "summary reporting" system.

In fact, the UCR does not even try to count all crimes reported to the police. What are referred to as index offenses--also called Part 1 crimes--are counted if these offenses are reported to police (and recorded by police). Index offenses include murder and non-negligent manslaughter, forcible rape, robbery, aggravated assault, burglary, larceny-theft, and motor vehicle theft. Other offenses, referred to as Part II crimes, are counted only if a person has been arrested and charged with a crime. The UCR therefore does not include such offenses as shoplifting, drug sale or use, fraud, prostitution, simple assault, vandalism, receiving stolen property, and all other non-traffic offenses unless someone is arrested. This means that a large number of crimes reported to the police are not measured by UCR.

Because the UCR reporting system is so fraught with problems, the U. S. Department of Justice has formally called for a scrapping of the UCR system in favor of a better data collection system relying on crime incidents. Specifically because the UCR system is seen as outdated and outmoded, the Justice Department is replacing its long-established Uniform Crime Reporting (UCR) system with the more

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Program, and a Juvenile Detention Information System, which collects and analyzes information on secure detention of juveniles in the state.

comprehensive National Incident-Based Reporting System (NIBRS).<sup>12</sup> For a crime to be counted in the system, it simply needs to be reported and investigated. It is not necessary that an incident be cleared or an arrest made, although unfounded reports are deleted from the record. The first step to these investigations and reports is the call for service.

Proponents of CFS further assert that the measure is superior to UCR records because dispatch data reflect callers' descriptions of events before officers arrive on the scene, thus eliminating bias in UCR data introduced by police behavior. Indeed, as long as researchers weed out multiple calls regarding the same incident, CFS is biased only by citizens' willingness to report crimes (Warner and Pierce, 1993).

In the secondary effects debate, calls for service have been routinely used as an index of crime effects. Several of the most frequently cited secondary effects reports by other communities as evidence of secondary effects use incident data based on calls for service. We list these studies below.<sup>13</sup> More

<sup>12</sup> See, e.g., <http://www.ojp.usdoj.gov/bjs/nibrs.htm>.

<sup>13</sup> A. *The Phoenix, Arizona, 1994*. Adult business study: impacts in late evening/early morning hours. City of Phoenix Planning department, June 1994: "The sexually oriented business **calls for service** survey on the six selected adult entertainment centers and six control locations were done to determine what type of calls were reported from the site and how frequently they were being reported per time of day. The statistics were based on data obtained from the Planning and research bureau of the Phoenix Police department." [Pg. 6; emphasis added.]

B. *The Malin Group Study, Dallas 1997*. An Analysis of the effects of SOBs on Neighborhoods in Dallas Texas: As of April 1997, Prepared for Ms. Sangeeta Kuruppillai, Assistant City Attorney, City of Dallas, Prepared by Peter Malin, MAI. "We studied **police calls for service** emanating from 10 different SOBs over a four year period...." (Emphasis added.)

C. *Austin, Texas*: "The study collected data for 45 serious criminal offenses, termed part 1 crimes by the Uniform Crime Report, and 21 sexually related criminal offenses. ...The data collected **represents calls to the Austin Police Department** from January 1, 1984 through December 31, 1985. Crime rates are expressed as the number of reported incidents per 1000 area residents." (Pg. 16; emphasis added.)

D. *Fulton County, GA*. Captain Ron and Lt. Sue Miller; Fulton County Police: Study of Calls for Service to Adult Entertainment Establishments which Serve Alcoholic Beverages, June, 1995 - May, 1997; Fulton County Police Department; Atlanta, Georgia; June 13, 1997, vetted by the 11<sup>th</sup> Circuit Court U.S. of Appeals, contains the following description: "The statistical information included in this study was obtained through the Fulton County Police Departments [sic] computerized incident and **calls for service** reporting program. Each call for police assistance, if taken over 911 enhance, is captured by a communication assisted dispatch (CAD) system. This information is available on every address in Unincorporated Fulton County where the police department is dispatched. Each report that is generated from a police call for service is identified with a departmental case number that is unique to that reported incident. (It should be noted that a police report is not generated for every call for service, and that officer initiated calls are not captured on the CAD system)." (Emphasis added.)

broadly, in the criminal justice research literature, calls for service are often used as the pertinent data.

We have also located five recent criminological publications *not in the secondary effects area* using CFS data.<sup>14</sup> Clearly, these investigators believe that the CFS measure an important criminal justice crime concept or they would not have employed them.

What CFS measure is extremely useful for the study of secondary effects of sexually oriented businesses. There are several reasons why calls for service are extremely useful for the secondary effects debate. CFS are a far more comprehensive index of both police activity and crime activity and thus a far more comprehensive indicator of secondary effects than are UCRs. For example, the crimes against person index we employ in the present study is composed of assault, cutting/stabbing, fight, kidnapping, robbery alarm, robbery business, robbery person and shooting. None of these individual crime related activities would come to light with the summary based UCR system which is a small subset of CFS. CFS is a much better index of the expenditure of police resources. CFS measure the days, the times during the day and night, as well as the number, of dispatches and calls to which the police are responding in a community.

CFS is a better measure of so called "blight" than UCR based crime accounting. It is impossible to measure blight--a highly critical aspect of the secondary effects debate--with UCRs. Neighborhood problems may not rise to the level of UCR crime but trouble residents nonetheless. These blight incidents often include police responses to public disorder and disturbance, drunken subjects, noise

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E. *Newport News Virginia*: "Of the more than 100 dispatch codes for different types of **police calls for service**, the Police department identified 32 dispatch codes for incidents that would impact an adjoining business or residential area." (Pg. 8; emphasis added.)

<sup>14</sup> These article are:

- A. Carter, S.P., et. al., Zoning Out Crime and Improving Community Health in Sarasota, Florida: "Crime Prevention Through Environmental Design". *American Journal of Public Health* v. 93 no. 9 (September 2003) p. 1442-5.
- B. Cohn, E.G., et. al., Even criminals take a holiday: Instrumental and expressive crimes on major and minor holidays. *Journal of Criminal Justice* v. 31 no. 4 (July/August 2003) p. 351-60.
- C. Smith, M.R. Police-led crackdowns and cleanups: an evaluation of a crime control initiative in Richmond, Virginia. *Crime & Delinquency* v. 47 no. 1 (January 2001) p. 60-83.
- D. Rotton, J., et. al., Violence is a curvilinear function of temperature in Dallas: a replication. *Journal of Personality and Social Psychology* v. 78 no. 6 (June 2000) p. 1074-81.
- E. Verma, A. The fractal dimension of policing. *Journal of Criminal Justice* v. 26 no. 5 (1998) p. 425-35.

disturbances and loud disturbing parties. Other minor offenses such as gambling law violations, harassment, subject pursuits, suspicious activity, suspicious vehicle, threats and trespassing are measured by CFS and are ignored by a UCR-based system. In summary, the use of CFS provides a much more comprehensive and complete picture of the possible adverse secondary effects of sexually oriented businesses in a community (or the absence of such secondary effects, as the case may be) than the use of the far more circumscribed measures such as UCRs.

The most serious source of bias in CFS data is the process by which police discover crimes--many come to their attention via means other than phone calls to dispatch centers. For example, citizens sometimes report crimes directly to officers on patrol and at station houses. Further, officers often observe criminal activity while patrolling their beats (Reiss, 1971). Errors in CFS crime counts also vary according to neighborhood. Dispatch data are more likely to undercount the total number of crimes that come to the attention of the police in neighborhoods where residents believe that officers respond more slowly to their calls, where residents are more fearful of crime (or the police), and where they experience more criminal victimization.

#### Crime Incident Filters

Several filters were used to make the data set more manageable. The first filter was the precinct in which each incident occurred. New York is policed at a precinct level. There are 77 separate precincts. Each crime incident in the data set included the precinct in which the incident was said to have occurred. We examined the location of the 60/40 businesses we intended to include in the analysis. The City provided us with a list of such businesses. We only included those businesses for which we could confirm specific operation dates occurring during the 54 months for which we had data. This included businesses that opened or closed during the 54 month period, but not those for which we could not confirm opening, closing, or operation throughout the period as a 60/40 use establishment. We

filtered out any incident not occurring in a precinct containing a 60/40 business, or a precinct touching a precinct containing a 60/40 business. This included a total of 21 separate precincts. The precincts included in the study were: 1, 5, 10, 13, 14, 17, 18, 19, 40, 41, 47, 94, 102, 103, 104, 107, 108, 109, 110, 112, and 115. Within these precincts we chose only those incident codes (as assigned by the NYPD) that were relevant for our analysis. Finally, only those incidents for which the final disposition codes indicated that a report was filed regarding the incident and/or an arrest was made were included in the final data set.

#### Plotting the Calls for Service to the Police by Address

These filtered data were then plotted using the Maptitude GIS software. This process resulted in the crime incident categories displayed in **Table 1**. A total 1,013,062 combined plotted crime incidents were included in the subsequent statistical analyses.<sup>15</sup>

### **RESULTS**

Three types of analyses are employed for the plotted incidents: 1) multiple regression analyses are performed wherein the census blocks with 60/40 businesses are compared to surrounding blocks that do not contain such businesses while statistically controlling for demographic features known to be related to crime; 2) “hotspot” analyses wherein the 60/40 business address is ranked among other addresses in the census blocks in terms of the frequency of calls for service to the police; 3) before-after analyses are undertaken using businesses that had opened closed or changed formats during the study period and

#### Hierarchical Regression Analyses using Demographic Variables and Proximity to 60/40 club.

The first analysis was designed to answer the question: once we have statistically controlled for social characteristics of the neighborhood (census block) known to be related to crime and community

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<sup>15</sup> We believe this is the largest data set ever plotted in a study of this kind.

disorder, what is the effect of the presence of a 60/40 eating or drinking establishment on crime and disorder?

Proximity to 60/40 club. A variable was created to represent the proximity of census blocks within the surrounding block groups to the “target” block containing the 60/40 establishment. Figure 2 provides an example of coding scheme for proximity to 60/40. A “1” was assigned to the block containing the 60/40 business. Blocks adjacent to the target block were assigned a “2.” Blocks adjacent to those were assigned a “3,” and finally, those adjacent to these blocks were assigned a “4.” (As noted above, a total of 179 Block Groups, made up of 967 Blocks, were included in the analyses. Block Groups were included if any of the following conditions were met: a) one or more Blocks in the Block Group contains a 60/40 business, b) one or more blocks containing a 60/40 business directly touches one or more Blocks in a block group; c) one or more blocks in the Block Group are within 500 feet of a 60/40 business.)

Hierarchical regression analyses. Regression models were developed to formally test effect of having a 60/40 eating or drinking establishment in a neighborhood once these factors were taken into consideration. A series of hierarchical regressions were performed. The demographic variable predictors included the number of males over the age of 18 in the block, the number of African Americans, the number of persons classifying themselves as Hispanic, the number of households comprised of at least one non-family member, and the number of households comprised of only related family members in the block.

The variable representing club proximity was entered as a last step in the model.

The models for each crime incident outcome variable are presented in **Tables 2 - 6**. **Table 2** displays the hierarchical regression analyses for crimes against persons using all 60/40 businesses in New York City. As can be seen from **Table 2**, the first variable, number of males in the population 18



years and over was significantly related to calls for service to the police, explaining three-percent of the variability in calls for service across the census blocks. Examination of the coefficients for this stage of the model revealed a positive Beta coefficient. Thus, the larger the number of males over the age of 18 in the census block, the greater the number of calls for service to the police. The next variable group added to the equation was comprised of variables measuring the number of African Americans and Hispanics in the population of the block. This variable group explained approximately an additional 4 percent of the variability in calls to the police across the census blocks. Examination of the coefficients indicated a positive Beta coefficient for Blacks and a negative coefficient for Hispanics. The addition of the social disorganization variables measuring household composition also contributed to explaining the variability in calls for service, increasing the amount of variance in calls for service to approximately 14 percent. Examination of the coefficients indicated that the greater the number of households containing related family members only, the fewer the calls for police service, while the presence of households with non-family members in them in the neighborhood was positively related to calls for service.<sup>16</sup>

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<sup>16</sup> Additional explanatory power in the variability in calls for service to the police in New York City would undoubtedly be gained with the inclusion of a variable in the model measuring the presence of alcohol serving and selling establishments. Overall, researchers have marshaled impressive evidence indicating that alcohol outlets influence crimes of rape, assault, homicide, robberies, auto-theft, public intoxication, and drunk driving. See: Scribner, R. A., MacKinnon, D. P., & Dwyer, J. H. (1995). Relative risk of assaultive violence and alcohol availability in Los Angeles County. *American Journal of Public Health*, 85, 335-340; Sherman, L. W., Gartin, E., & Buerger, M. E. (1989). Hot spots of predatory crime: Routine activities and the criminology of place. *Criminology*, 27, 27-56; Roncek, D. W., & Maier, P. A. (1991). Bars, blocks, and crimes revisited: Linking the theory of routine activities to the empiricism of hot spots. *Criminology*, 29, 725-753; Watts, R. K., & Rabow, J. (1983). Alcohol availability and alcohol related problems in 213 California cities. *Alcoholism: Clinical and Experimental Research*, 7, 47-58; Nielsen, A. L., & Martinez, R., Jr. (2003). Reassessing the alcohol-violence linkage: Results from a multiethnic city. *Justice Quarterly*, 3, 445-469; Parker, 1995, 1993; Parker & Rebhum, 1995). Some studies have posited a stronger effect for bars on crime, compared to other social disorganization predictors (Roncek, D. W., & Bell, R. (1981). Bars, blocks, and crime. *Journal of Environmental Systems*, 11, 35-47.; Roncek, D. W., & Maier, P. A. (1991). Bars, blocks, and crimes revisited: Linking the theory of routine activities to the empiricism of hot spots. *Criminology*, 29, 725-753; Roncek, D. W., & Pravatiner, M. A. (1989). Additional evidence that that taverns enhance nearby crime. *Sociology and Social Research*, 73, 185-188; Zahn, M. (1998). *Homicide and public policy*. Ninth Annual Walter C. Reckless Memorial Lecture, Columbus, OH: Criminal Justice Research Center, Ohio State University; Nielsen, A. L., & Martinez, R., Jr. (2003). Reassessing the alcohol-violence linkage: Results from a multiethnic city. *Justice Quarterly*, 3, 445-469.) Alaniz et al. (1998) examined the connection between immigrants and violence across three California communities (Alaniz, M. L., Cartmill, R. S., & Parker, R. N. (1998). Immigrants and violence: The importance of neighborhood context. *Hispanic Journal of Behavioral Sciences*, 20, 155-174; Peterson, R. D., Krivo, L. J., & Harris, M. A. (2000). Disadvantage and neighborhood violent crime: Do local institutions matter? *Journal of Research in Crime and Delinquency*, 37, 32-63.



Most importantly for the purposes of this study, the addition of the variable measuring the proximity of surrounding census blocks to the census block containing the 60/40 establishments added no statistically significant explanatory power to the regression equation.

Where there are meaningless but statistically significant relationships due to the exceptionally large N (sample size) employed in the analyses (at times nearly 1,000 census blocks), we favor “strength” over a technical “significance.” In this regard, we follow what has been called the Hays’ “testmanship” dictum, which teaches that with sufficiently large N virtually any difference between compared means (or correlations between two variables) becomes statistically significant.<sup>17</sup> Consequently, in the analyses we acknowledge Kerlinger’s admonition that the strength of a relationship is of primary importance; the significance of the relationship is ancillary to the question of how much of the variance has been accounted for.<sup>18</sup>

We most often focus on the so called “effect size” as an indication of the importance of one or several variables in “explaining” or accounting for the variability in crime incidents across census blocks in Daytona Beach. As a simple rule of thumb, Cohen (1988) suggests that a “small” effect has a mean

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In addition, Plaintiffs in the case: TEN'S CABARET, INC. Formerly Known as STRINGFELLOW'S OF NEW YORK, LTD., Plaintiff v. CITY OF NEW YORK et al., Defendants. PUSSYCAT LOUNGE, INC., Plaintiff, v. CITY OF NEW YORK et al., Defendants. Index No. 121197/02, Index No. 122740/02. SUPREME COURT OF NEW YORK, NEW YORK COUNTY 1 Misc. 3d 399; 768 N.Y.S.2d 786; 2003 N.Y. Misc. LEXIS 1163 September 9, 2003, have presented data demonstrating that 60/40 businesses do not cause the secondary effects of increased crime. (Ten's Cabaret Exhibit D, 2/2001 Police Report). These data consist of a “hotspot” ranking of businesses by police that are crime and disorder problems for the neighborhood. We have also examined these data and conclude that the 60/40 businesses do not appear as significant sources of crime and disorder by the police’ own ranking method. Instead, alcohol serving businesses that are not 60/40 eating or drinking establishments were by far the source of greatest police concern.

The failure to account for these alcohol-serving businesses in the same block as the 60/40 businesses in the present study may also contribute to the technically significant relationships for the addition of the proximity variable reported below.

<sup>17</sup> Hays, W.L. Statistics for the social sciences (2nd ed.) New York; Holt Rinehart and Winston, 1973. Hayes “testmanship” dictum states: “There is surely nothing on earth that is completely independent of anything else. The strength of an association may approach zero, but it should seldom or never be exactly zero. If one applies a large enough sample of the study of any relation, trivial or meaningless as it may be, sooner or later a significant result will almost certainly be achieved. This kind of problem occurs when too much attention is paid to the significance tests and too little to the degree of statistical association the finding represents. This clutters up the literature with findings that are often not worth pursuing and which serve only to obscure the really important predictive relations that occasionally appear.”

<sup>18</sup> Kerlinger, F.N. & Pedhazur, E.J. (1973). Multiple regression in behavioral research. New York: Holt, Rinehart, and Winston.

correlation (or Beta) coefficient of 0.10 (i.e. explains 1% of the variance since  $R^2=1\%$ ), a “medium” effect has a coefficient of 0.30 (i.e. explains 9% of the variance), and a “large” effect has a coefficient of 0.50 (i.e. explains 25% of the variance).<sup>19</sup> Any effect size approaching 1 percent is therefore essentially trivial; and any effect size below 1 percent is extremely suspect as an indicator of an important effect even though such trivial amounts of variance explained may be technically statistically significant.

**Table 3** presents the hierarchical regression analyses for crimes against property using all 60/40 businesses in New York City. A very similar pattern of results was obtained for property crime incidents as crimes against persons. Overall, while more variability was explained in these crime events (nearly twice as much, or 34 percent) the pattern of coefficients remained the same. The addition of the variable measuring the proximity of surrounding census blocks to the census block containing the 60/40 establishment added only three tenths of one percent to the explanatory power to the regression equation. While technically “statistically significant,” the addition is substantively meaningless.

**Table 4** presents the hierarchical regression analyses for disturbing the peace using all 60/40 businesses in New York City. A very similar pattern of results was obtained for these incidents as in the case of crimes against property.

**Table 5** presents the hierarchical regression analyses for drug-related crimes using all 60/40 businesses in New York City. Overall, the model did a poor job of explaining the drug-related crimes. The addition of the variable measuring the proximity of surrounding census blocks to the census block containing the 60/40 establishment added no explanatory power to the regression equation.

**Table 6** presents the regression analyses for sex crimes using all 60/40 businesses in New York City. These results may be interpreted as indicating that while calls for service to the police in a particular neighborhood may be attributable to social factors such as the presence of young male adults, and its race/ethnic composition (variables that are determinants of the size of the pool of motivated

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<sup>19</sup> Cohen (1988) *Statistical power analysis for the behavioral sciences*, 2nd edition. Hillsdale, NJ: Erlbaum.)

crime offenders and the presence of suitable targets for predatory crimes), calls to the police are not related to the presence of a 60/40 adult eating drinking establishment in the neighborhood. These findings cast at least substantial doubt on the theory that 60/40 businesses or the nature of their entertainment is significantly associated with crime events in a neighborhood.

Should be noted that there are very few incidents of prostitution--only 41 incidents.

“Hotspot” analyses. A “hotspot” analyses wherein the 60/40 business address is ranked among other addresses in the census blocks in terms of the frequency of calls for service to the police was also undertaken. A “hotspot” analysis was conducted to answer this question: Do 60/40 businesses rank among the “hotspots” of crime and disorder in the community in which they located?

The “hotspot” methodology used in the present study follows that employed in the Garden Grove Study (1991). The Garden Grove Study was an attempt to determine if adult businesses in the City of Garden Grove, CA constituted a public safety hazard. The authors undertake a “hotspot” analysis (see page 23) by establishing the relative rank of sexually oriented business addresses versus other business addresses in the immediate area in terms of crime frequency.

**Table 7** displays the results of a “hot spot” analyses within the census block surrounding each 60/40 business open throughout the period of 1998 to June 2002. In the table we provide the number and percentage of crimes attributed to the specific 60/40 business address, and the rank of the 60/40 address relative to other addresses in the neighborhood. This analyses included Al’s Mr. Wedge, Baby Doll Lounge, Bare Elegance, Club 44, Cozy Cabin, Goldfingers, Lace, New York Dolls, Private Eyes, Pussycat, Scores, Tens, Vip Club, Vixen, and Wiggles.

Next, the conventions developed in the Garden Grove Study were employed to interpret the hotspot findings. This method involves comparing specific sexually oriented business addresses with the remaining neighborhood in terms of percentage of crime and the relative ranks of addresses. In the

Garden Grove study, for example, crimes from seven sexually oriented businesses located on Garden Grove Boulevard in the city of Garden Grove were examined. The authors then calculated the percentage of crime accounted for by the business address among all crime on Garden Grove Boulevard. They reasoned that, if the sexually oriented business accounted for 10-25 percent of crimes in a neighborhood, it could be concluded that they constituted a “significant” source of crime events. They also computed the relative ranking of the sexually oriented business address among all addresses on Garden Grove Boulevard and found that three to five of the six adult businesses were among the top ten “hotspots.” This finding further bolstered their conclusion that these businesses were a significant source of crime

By this method it can readily be seen that the 60/40 businesses in New York City are a very insignificant source of crime events within their neighborhood. As is shown in **Table 7**, the 60/40 business addresses rarely rise to the level of even ten-percent of crime events in the neighborhood. Several cannot be ranked because there are zero crime events at their address. The vast majority of the 60/40 businesses had very few crime incidents, no matter what the crime category, relative to the rest of the neighborhood.

In summary, by this method we conclude that 60/40 businesses do not constitute either a serious or significant public safety or crime hazard. These findings again cast substantial doubt on the City’s theory that 60/40 businesses or the nature of their entertainment is significantly associated with crime events in a neighborhood.

Before-after analyses. We undertook a “before-after” analysis of 60/40 businesses in New York City. Before-after analyses are undertaken using businesses that had opened closed or changed formats during the study period. We expected that changes in the presence or absence of these businesses in the community would be associated with increases and decreases in crime. When a business ceases

operation or changes to a non-sexually oriented format, crime events should subside; when a sexually oriented business opens crime events should increase.<sup>20</sup> We examined crime incidents before and after opening for the following 60/40 businesses: Billy's Topless, Club 44, Gallaghers, Gallaghers 2000, Candlewood Inn (new address), Candlewood Inn (old address). The businesses and the changes that occurred are listed in the table immediately below.

**Businesses Opening, Closing, or Changing Format Between January 1998 and June 2002**

Business Name	Address	Change
Billy's Topless	729 Avenue of the Americas	no longer topless in 01
Club 44	689 8th Ave.	opened in October of 2001
Gallaghers	39-33 Queens Blvd.	closed in mid 2000
Gallaghers 2000	43-19 37th street	opened in end of 2000
Candlewood Inn - new	32-17 College Point	opened in 2000

<sup>20</sup> As the authors of the Garden Grove Study correctly point out, a "hotspot" analysis may be useful, but it tells us nothing about whether the sexually oriented businesses examined in their study caused adverse secondary effects. The authors note (see page 24): "Of course, one can argue that the relationship is non-causal or spurious; that these businesses simply moved into a neighborhood that happened to already have a high crime rate." In order to examine the possibility of causality a quasi-experimental, before-after analysis is employed in the Garden Grove Study. We employ a similarly-designed analysis in this portion of the present study. This method is employed to answer the question: Once a sexually oriented business is opened in a New York City neighborhood does the crime incident rate rise in the post-opening period? If we do not detect an effect in the months following an opening, doubt is cast on the City's theory that sexually oriented 60/40 businesses or the nature of their entertainment is responsible for crime events in the local vicinity.

Description of the method. The hierarchical regression approach employed above is actually a simple variation of the so-called "static group comparison." This design is diagrammed as:

<b>S.O Business Area</b>	<b>X</b>	<b>Crime (impact)</b>
<b>Control Area</b>		<b>Crime (control)</b>

The X in this diagram represents the presence of a sexually oriented 60/40 business in the impact area but not in the control area. The hypothetical secondary effect is estimated as the difference of the two crime measures:

$$\text{Secondary Effect} = \text{Crime (Impact)} - \text{Crime (Control)}$$

If the impact and control areas are identical in every respect (demographic characteristics, housing characteristics) except the presence of a sexually oriented business, the secondary effect estimate is valid. On the other hand, if the two areas differ in any relevant way the secondary effect estimate is not as informative as it could be. The "static group comparison" design is strengthened considerably when a before-after contrast is added. Using the same notation this design looks as follows:

<b>S.O. Area</b>	<b>Crime (Impact, Before)</b>	<b>X</b>	<b>Crime (Impact, After)</b>
<b>Control Area</b>	<b>Crime (Impact Before)</b>	.	<b>Crime (Impact, After)</b>

The hypothetical secondary effect is now estimated as the before-after difference in the impact area.

$$\text{Secondary Effect} = \text{Crime (Impact, After)} - \text{Crime (Impact, Before)}$$

The analogous difference for the control area serves as a benchmark for assessing the validity and significance of the secondary effect. The superiority of the before-after design over the "static group comparison" design lies in the nature of their control comparisons. Over short time periods, say one or two years, impact and control areas are likely to remain stable in relevant ways. If the stability assumption holds, before-after differences are immune to the garden-variety validity threats that plague static impact-control differences. If change scores are standardized, then as percent changes, before-after secondary effect estimates are relatively robust to minor differences between impact and control areas.

address	Blvd.	
Candlewood Inn - old address	41-57 College Point Blvd.	closed in 2000

We compare the crime event change, or lack thereof, before and after openings and closings with control areas selected from the surrounding neighborhoods. If we fail to detect an effect in the year following opening, closing or change of entertainment format for the businesses in this before-after comparison, serious doubt is cast on the theory that these 60/40 businesses or the nature of their entertainment is responsible for crime events in the local vicinity.

**Table 8** displays the results of the before-after analyses of crime incidents surrounding the 60/40 businesses Billy's Topless, Club 44, Gallaghers, Gallaghers 2000, Candlewood Inn (new address), Candlewood Inn (old address). The table includes crime counts for the study period for each business. **Figures 3-8** display the results in graph form using the percentage of total incidents for each individual block by year in order to standardize the results.

What is immediately apparent from the graphs is that no matter what the event--opening or closing of the 60/40 business, or transformation from topless (i.e., sexually oriented) to non-topless venue--the crime incidents in the block surrounding the 60/40 businesses tracked the control blocks precisely. **Figure 3** provides an excellent example of this pattern. This Figure shows that the block containing Billy's Topless 60/40 business perfectly mirrored the control blocks crime patterns. Crime increased somewhat until 2000 and then began a decline after that year. The pattern for the block in which Billy's was located was identical to the surrounding blocks despite the fact that Billy's Topless ceased operations as a sexually oriented business. Had Billy's Topless been responsible for adverse secondary crime effects on the block, we would have expected a more precipitous decrease in crime incidents. There was none.

**Figure 4** provides another example. Club 44 opened for businesses in 2001. If the negative secondary effects hypothesis is correct we would have expected that the block on which Club 44 was located would experience an uptick in crime events. This did not occur. Instead, crime incidents in the Club 44 block tracked the control blocks, all of which showed a decrease in crime incidents. The remaining figures show the same pattern--no matter what the change in the opening or closing of the 60/40 business--there was no impact on crime incidents relative to the control locations.

**Tables 9-14** display the results of the before-after analysis in summary form. Again, these results fail to reveal adverse secondary crime effects for the 60/40 businesses. **Table 9**, for example, shows the results for Billy's Topless and surrounding areas. Recall that in 2001 this business changed format and no longer offered topless entertainment. If the City's *combined* "60/40 clubs are 'adult' businesses" *and* "adult businesses cause crime" theory were correct, this change in the nature of the business should have resulted in a large decrease in crime. However, to the contrary, we found only a modest decrease while the control areas (with no adult businesses) experienced a more pronounced drop (study block change = 388 incidents to 216 incidents, comparison blocks change = 140 incidents to 62 incidents).

Similarly, the results for Club 44 displayed in **Table 10** show no evidence of adverse secondary crime effects. Recall that Club 44 opened in 2001. According to the City's secondary effects hypothesis, this event should have been associated with an increase in crime in the surrounding area. In contrast, we found a substantial decrease in crime for both study and control areas (study block change = 300.00 to 122, comparison blocks change = 160 to 67).

Likewise, Gallaghers (39-33 Queens Blvd.) closed in 2000. This event, if the City's secondary effects theory is correct, should have resulted in an observable decrease in crime well beyond what would be observed for the control blocks. Contrary to this assumption, however, we found a substantial



drop in crime nearly identical to control area (study block change = 53 to 29, comparison blocks change = 26 to 18).

Gallaghers 2000 opened in 2000 at a new address. We should have observed a dramatic increase in crime events. Instead, we observed so few incidents of crime in both test and control areas as to be essentially meaningless. The same pattern was observed for the opening, closing and relocation of the Candlewood Inn. There was simply no support for the secondary effects hypothesis.

These findings cast very substantial doubt on the City's theory that sexually oriented 60/40 businesses or the nature of their entertainment is significantly associated with crime events in a neighborhood.

### **SUMMARY AND IMPLICATIONS**

In order to test the assumption that New York City may regulate so called "60/40" businesses because they are associated with negative secondary effects, an extensive and detailed empirical study of criminal activity and disorder surrounding these businesses in Manhattan was undertaken utilizing raw data provided by the New York City Police Department (NYPD). Three hypothesis concerning secondary effects are tested in this study using calls for service to the New York City Police within local neighborhoods defined by census blocks. If secondary effects are associated with 60/40 eating drinking establishments in New York City we would expect the following: 1) The presence of a "60/40" eating or drinking establishments in New York will be associated with a higher number of crime incidents reported in localized areas surrounding these businesses compared to the number of crime incidents reported in comparable localized areas that do not contain these businesses; 2) Such businesses will rank among the "hotspots" of crime and disorder in the community in which they located; and 3) Changes in the presence or absence of these businesses in the community will be associated with increases and

decreases in crime. When a business ceases operation crime events should subside, when such a business opens crime events should increase.

To test these hypotheses we first conducted regression analyses wherein the blocks with 60/40 businesses are compared to surrounding blocks that do not contain such businesses while statistically controlling for demographic features of the blocks that are known to be related to crime. We then undertook a “hotspot” analysis within the neighborhood where the 60/40 business is located. This focused analysis by specific address allows us to determine if the 60/40 businesses have required special attention from the police or if other addresses in the immediate neighborhood are more often the source of police attention. Finally, we undertook a before-after analysis wherein we examined crime one year before and one year after 60/40 business openings and closings. We compared the crime change or lack thereof before and after the openings and closings.

The regression analyses showed that variables traditionally found to be attributable to social disorganization such as a local area’s population age structure (especially the presence of young adults), and its race/ethnic composition were related to the number of calls to the police. The “hotspot” analysis showed that that the 60/40 businesses are a very insignificant source crime of crime events within their neighborhood in New York City. The 60/40 business addresses rarely rise to the level of even ten-percent of crime events in the neighborhood. Several cannot be ranked because there are zero crime events at their address. The vast majority of the 60/40 businesses had very few crime incidents, no matter what the crime category, relative to the rest of the neighborhood. The before-after analyses revealed that changes in the presence or absence of these businesses in the community were not associated with increases and decreases in crime.

These findings, at a minimum, cast substantial doubt on the City’s theory that 60/40 businesses or the nature of their entertainment is significantly associated with crime events in a neighborhood.

Secondary Effects

40

Figure 2. Example of coding scheme for proximity to 60/40 used in regression analyses.

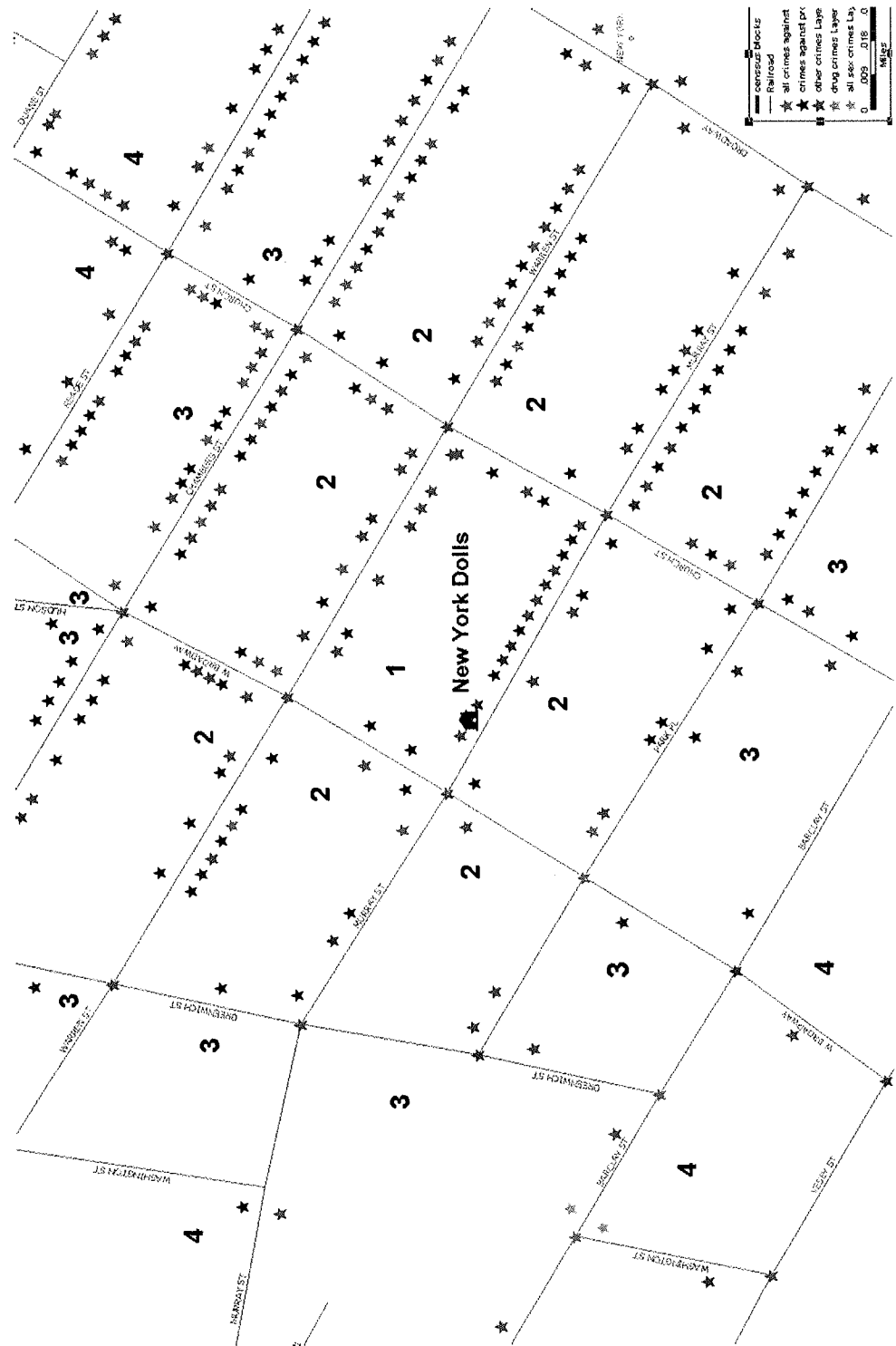
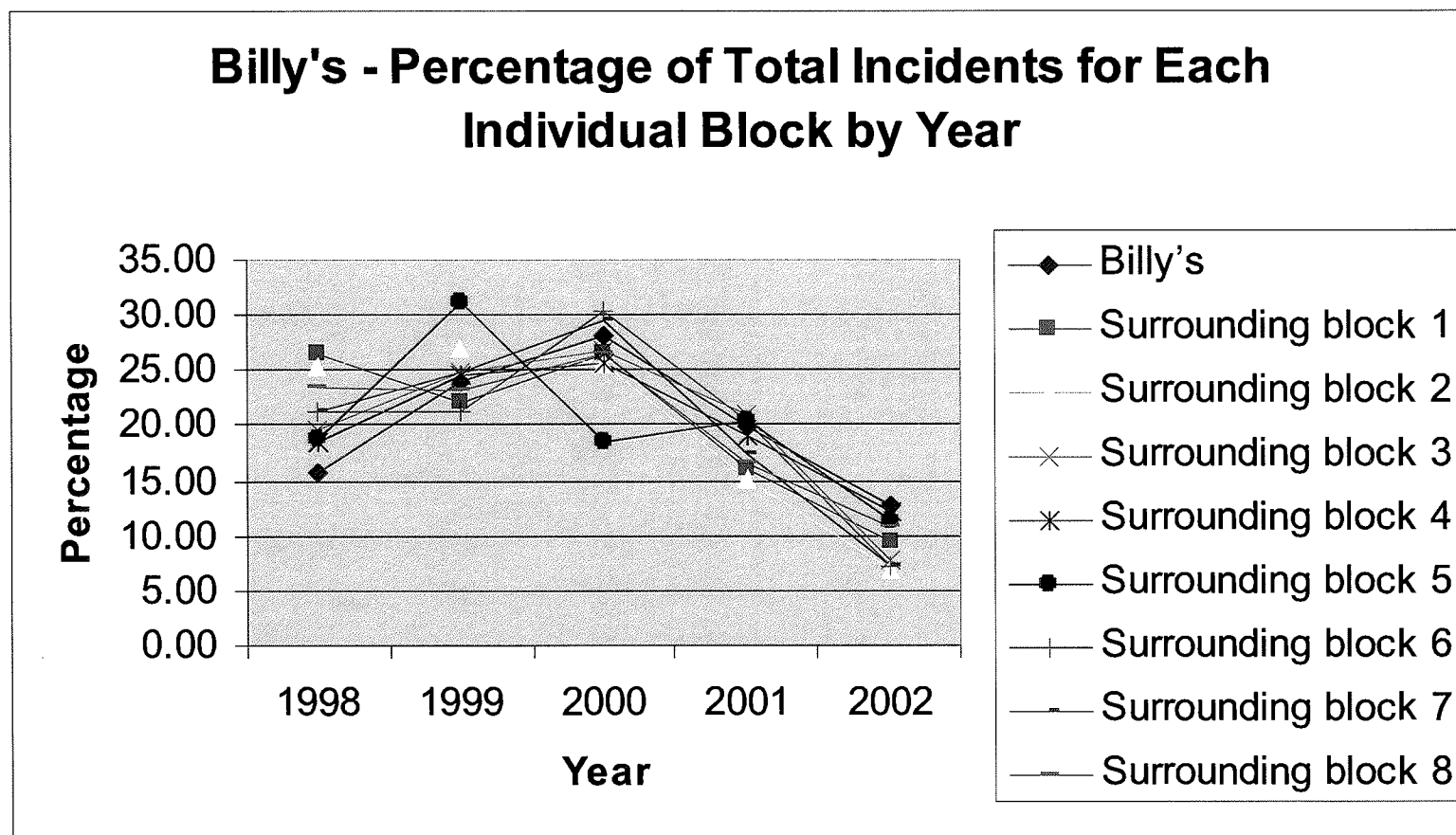
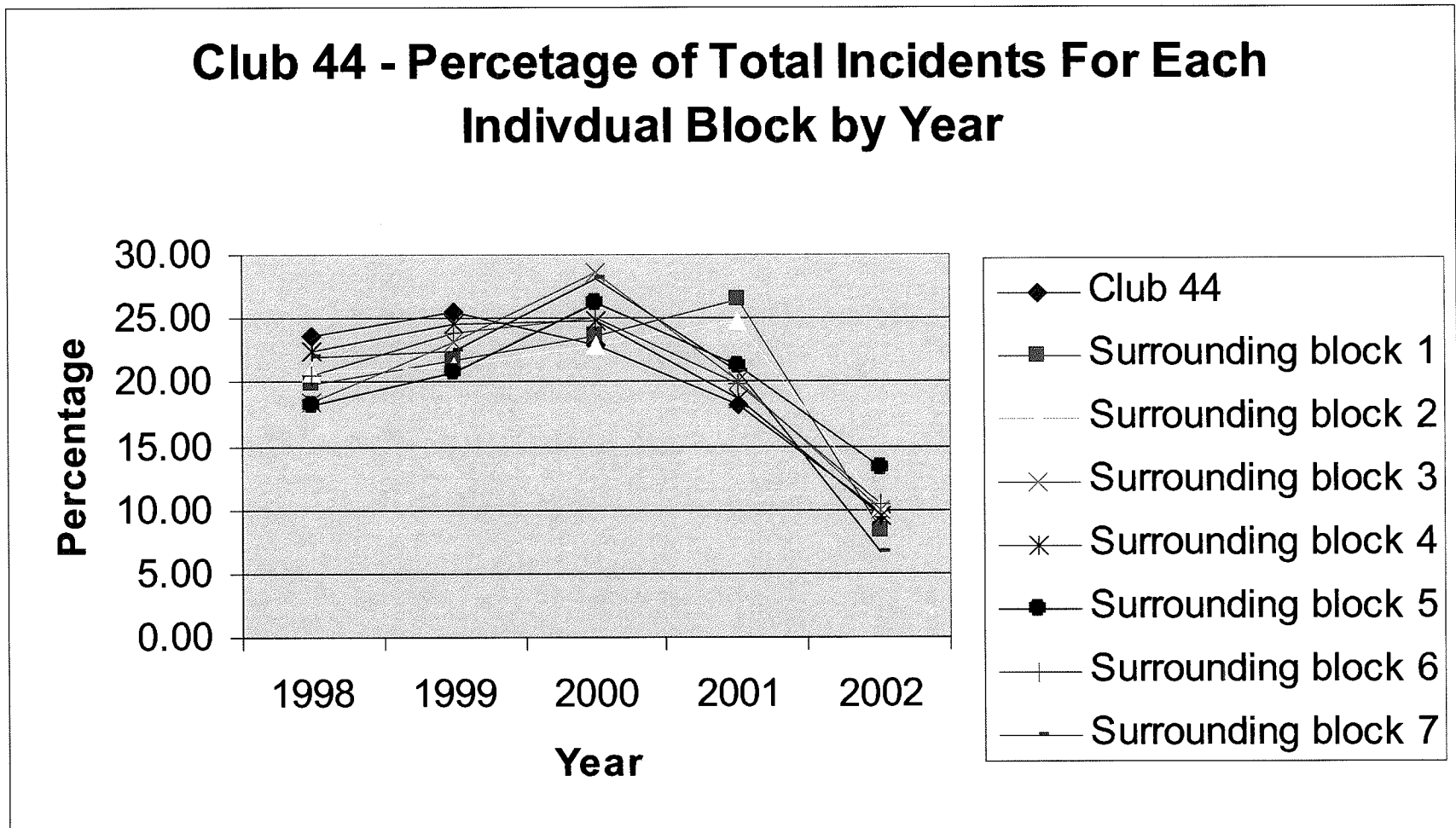


Figure 3: Billy's – Percentage of Total Incidents for Each Individual Block By Year.



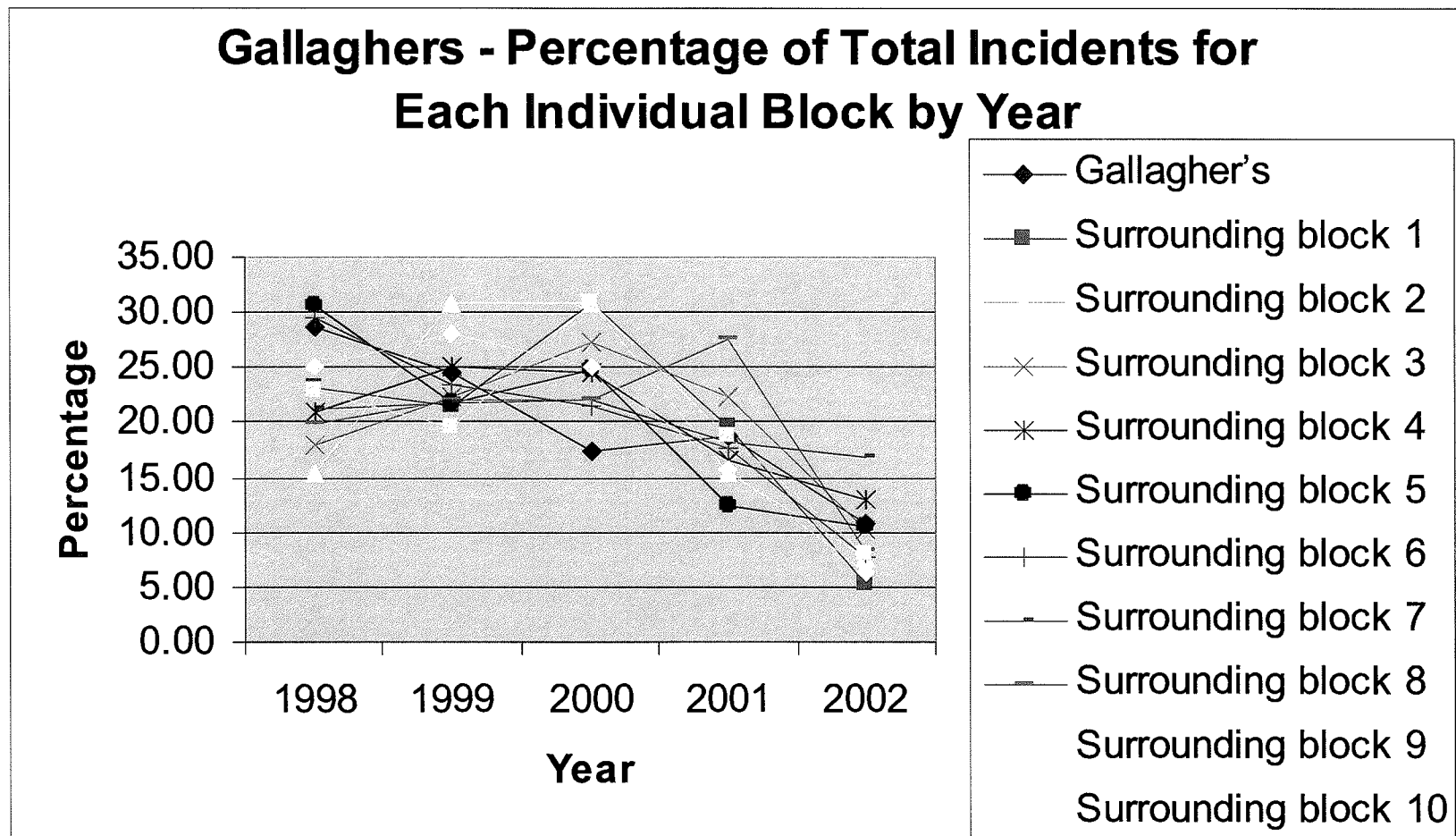
Billy's ceased operations as topless in 2001.

Figure 4: Club 44 – Percentage of Total Incidents for Each Individual Block by Year.



Club 44 opened for business in 2001.

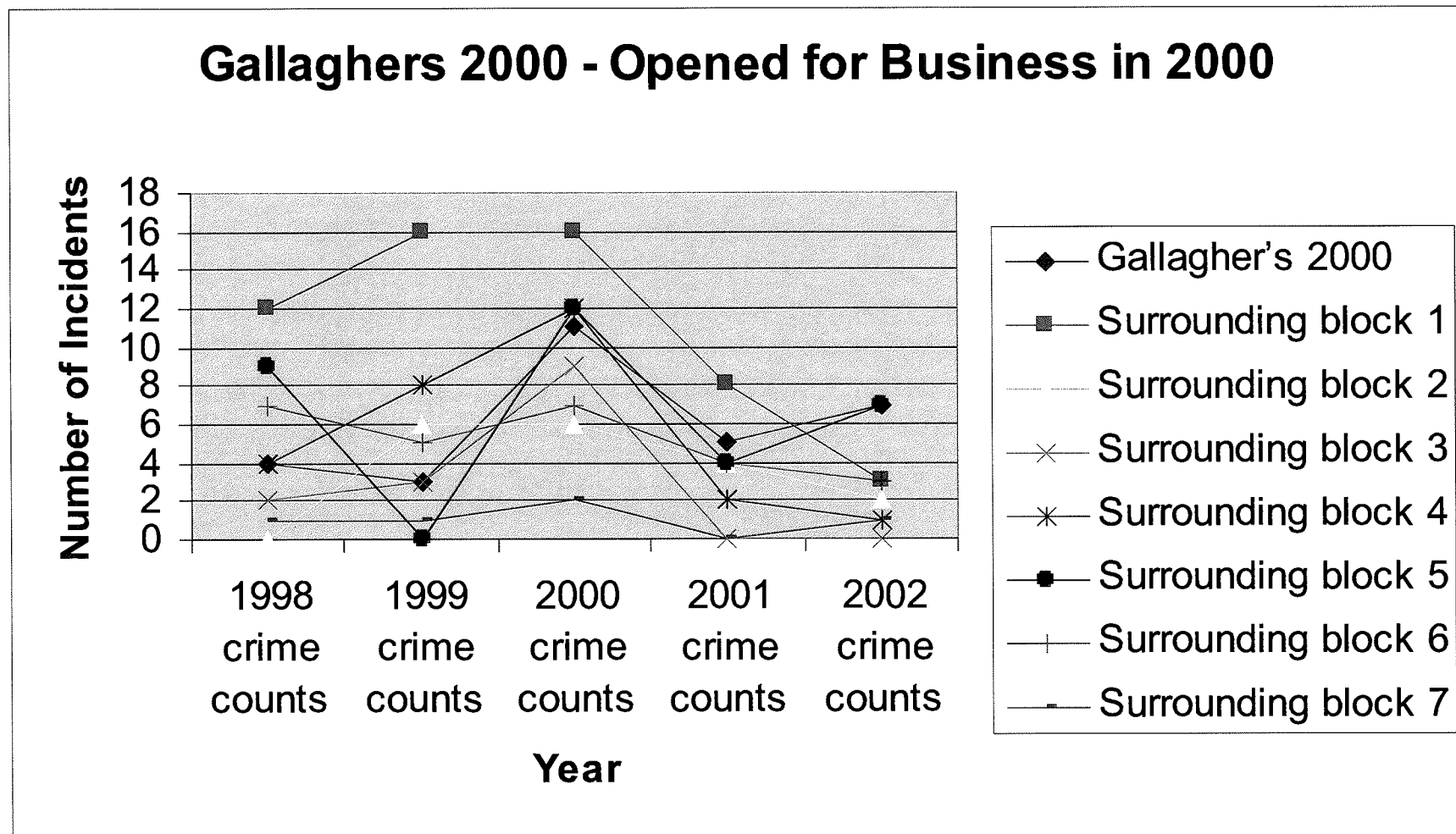
Figure 5: Gallaghers – Percentage of Total Incidents for Each Individual Block by Year.



Gallaghers ceased operations in 2000.

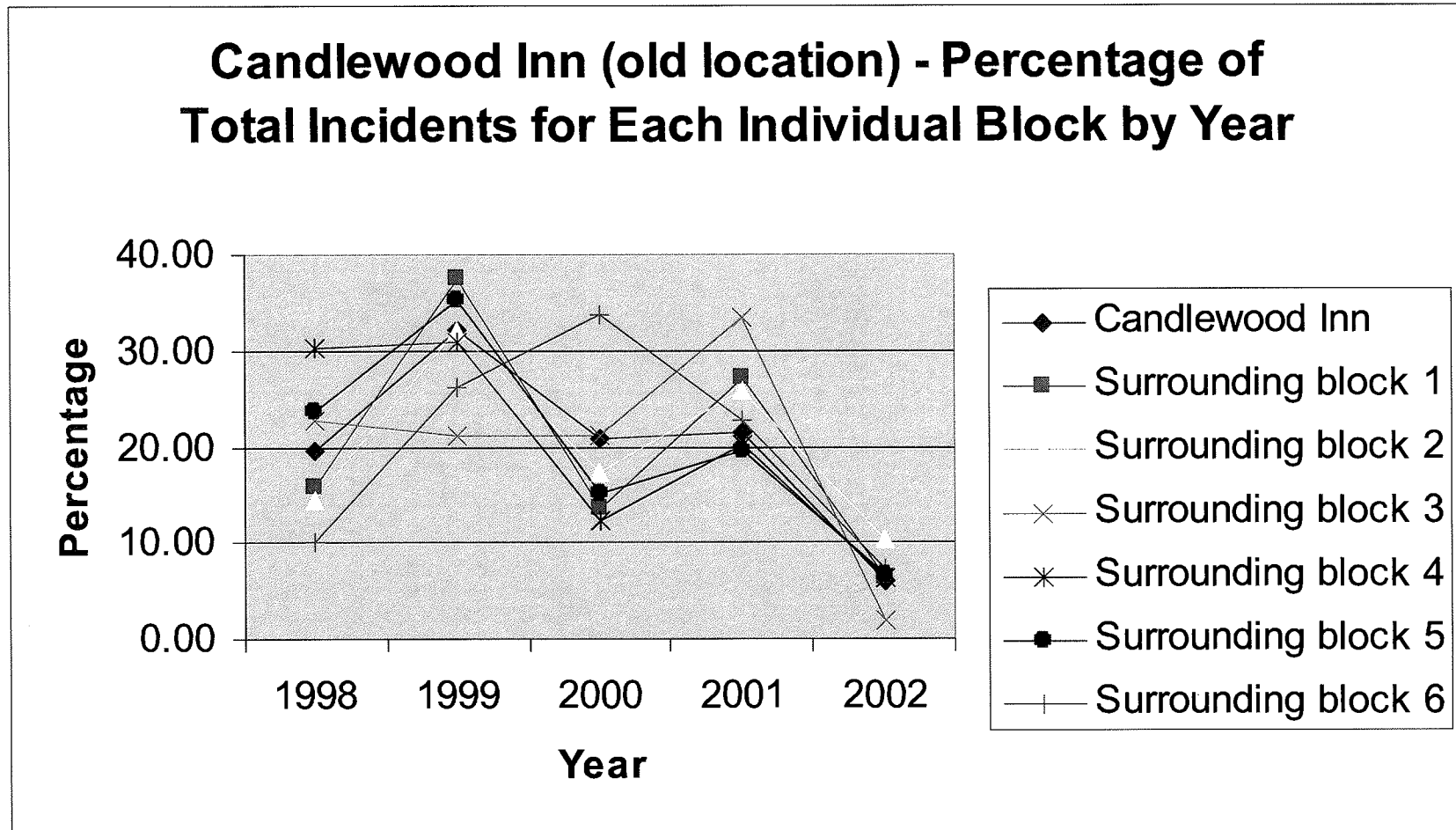


Figure 6: Gallaghers 2000 – Percentage of Total Incidents for Each Individual Block by Year.



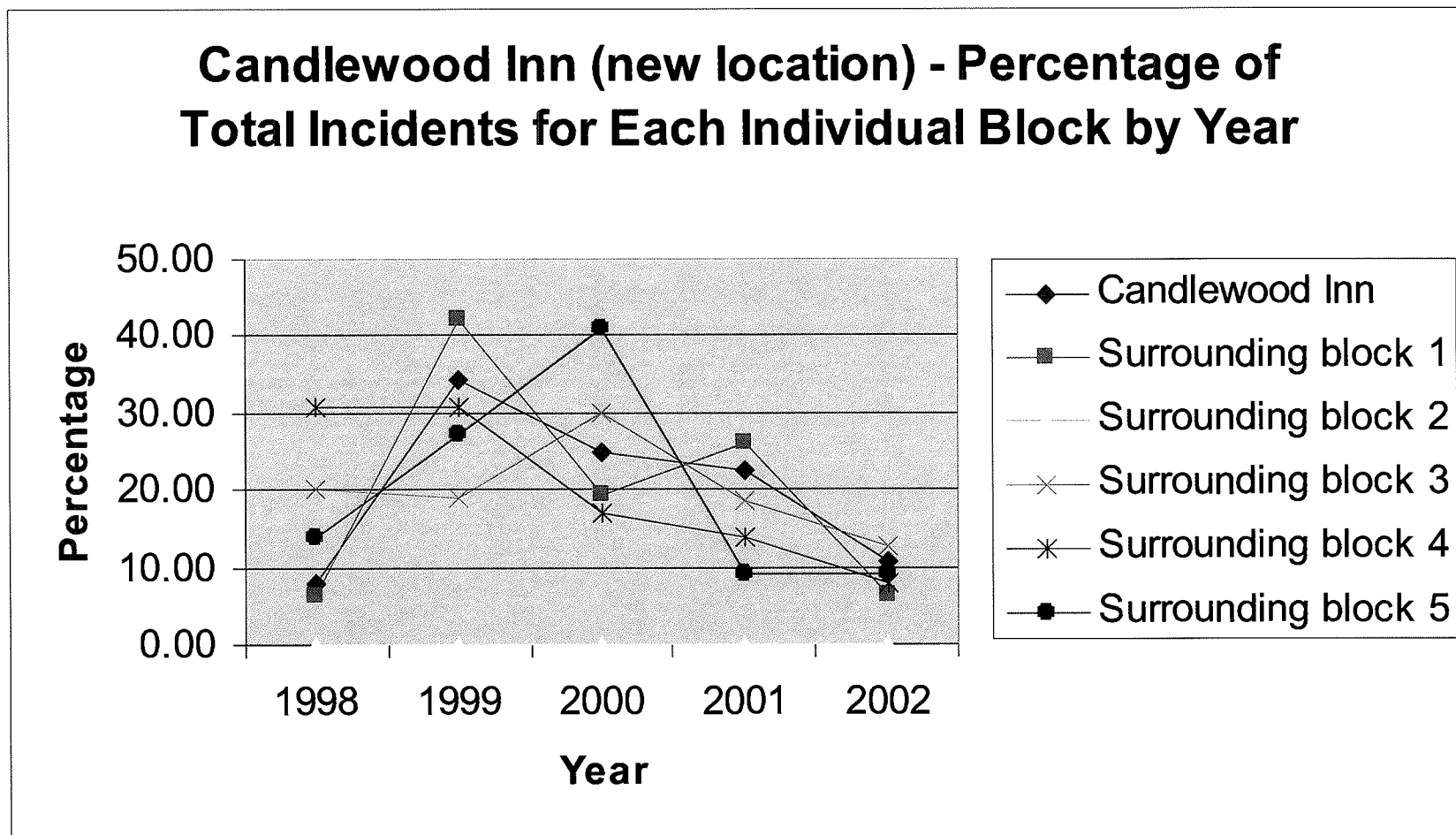
Gallaghers 2000 opened for business in 2000.

Figure 7: Candlewood Inn (old location) - Percentage of Total Incidents for Each Individual Block by Year.



Candlewood Inn ceased operations at this location in 2000.

Figure 8: Candlewood Inn (new location) – Percentage of Total Incidents for Each Individual Block by Year.



Candlewood Inn opened for business at this location in 2000.

**Figure 1. The incident codes we included as they appear in the New York Police Department Radio Code Signal Guide, and the heading under which they appear in the Guide.**

Possible Crimes

10F1 – Firearm/inside  
10F2 – Firearm/outside  
10F9 – Firearm/transit  
10K1 – Knife/inside  
10K2 – Knife/outside  
10K9 – Knife/transit  
10H1 – Call for help/inside  
10H2 – Call for help/outside  
10H9 – Call for help/transit  
10Y3 – Other/serious  
10Y7 – Possible/child abuse  
10P1 – Prowler/inside  
10P2 – Prowler/outside  
10P9 – Prowler/transit  
10N1 – Narco sale/in  
10N2 – Narco sale/out  
10N9 – Narco sale/transit  
10S1 – Shots fired/inside  
10S2 – Shots Fired/outside  
10S9 – Shots Fired/Transit  
10V1 – Suspicious vehicle/inside  
10V2 – Suspicious vehicle/outside  
10V9 – Suspicious vehicle/transit

Alarms

11A1 – Audible/inside: live person  
11A2 – Audible/outside: live person  
11C3 Commercial holdup  
11C4 – Commercial Burglary  
11R3 – Residential Holdup  
11R4 – Residential Burglary

Vehicle Check

16 – Vehicle reported stolen

Robbery (Past)

20C - Commercial  
20C9 – Commercial/transit  
20R – Residence  
20Q1 – Other/inside  
20Q2 – Other/outside

20Q9 – Other/transit

Burglary Past

21C - Commercial

21C9 – Commercial/transit

21R – Residence

21Q1 – Other

21Q9 – Other/transit

Larceny Past

22P1 – From person/inside

22P2 – From person/outside

22V1 – Stolen vehicle/inside

22V2 – Stolen vehicle/outside

22V9 – Stolen vehicle/transit

22Q1 – Other/inside

22Q2 – Other/outside

Assault Past

24K1 – Knife/inside

24K2 – Knife/outside

24K6 – Knife/family

24K7 – Knife/child abuse

24K9 – Knife/transit

24S1 – Shots/inside

24S2 – Shots /outside

24S6 – Shots /family

24S7 – Shots /child abuse

24S9 – Shots /transit

24W1 – Assault with weapon/inside

24W2 – Assault with weapon /outside

24W6 – Assault with weapon /family

24W7 – Assault with weapon /child abuse

24W9 – Assault with weapon /transit

24Q1 – Other/inside

24Q2 – Other /outside

24Q6 – Other /family

24Q7 – Other /child abuse

24Q9 – Other /transit

Other Crimes Past

29C – Criminal Mischief

Robbery in Progress

30C - Commercial

30C9 – Commercial/transit

30R – Residence  
30Q1 – Other/inside  
30Q2 – Other/outside  
30Q9 – Other/transit

Burglary in Progress

31C - Commercial  
31C9 – Commercial/transit  
31R – Residence  
31Q1 – Other  
31Q9 – Other/transit

Larceny in Progress

32P1 – From person/inside  
32P2 – From person/outside  
32V1 – Stolen vehicle/inside  
32V2 – Stolen vehicle/outside  
32V9 – Stolen vehicle/transit  
32Q1 – Other/inside  
32Q2 – Other/outside

Assault in Progress

34K1 – Knife/inside  
34K2 – Knife/outside  
34K6 – Knife/family  
34K7 – Knife/child abuse  
34K9 – Knife/transit  
34S1 – Shots/inside  
34S2 – Shots /outside  
34S6 – Shots /family  
34S7 – Shots /child abuse  
34S9 – Shots /transit  
34W1 – Assault with weapon/inside  
34W2 – Assault with weapon /outside  
34W6 – Assault with weapon /family  
34W7 – Assault with weapon /child abuse  
34W9 – Assault with weapon /transit  
34Q1 – Other/inside  
34Q2 – Other /outside  
34Q6 – Other /family  
34Q7 – Other /child abuse  
34Q9 – Other /transit

Other Crimes in Progress

39C – Criminal Mischief/inside  
39C – Criminal Mischief/outside

Disorderly Person/Group/Noise

50G1 – Group/inside  
50G2 – Group/outside  
50P1 – Person/inside  
50P2 – Person/inside  
50N1 – Noise/inside  
50N2 – Noise/outside

Dispute

52F1 – Firearm/inside  
52F2 – Firearm/outside  
52F6 – Firearm/family  
52F9 – Firearm/transit  
52K1 – knife/inside  
52K2 – knife /outside  
52K6 – knife /family  
52K9 – knife /transit  
52D1 – Dispute/inside  
52D2 – Dispute/outside  
52D6 – Dispute/family  
52V1 – Vio o prot/inside  
52V2 – Vio o prot /outside  
52V6 – Vio o prot /family  
52V9 – Vio o prot /transit

Quality of Life

64D – Public drinking  
64J – Prostitution  
64K – Lewd Acts  
64L – Loitering  
64R – Trespassing  
64U – Public urination  
64V – Vandalism



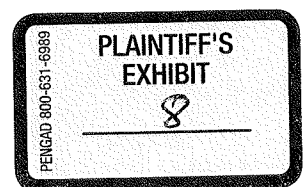
**EXAMINING THE RELATIONSHIP BETWEEN BUSINESSES THAT COMPLY  
WITH THE “60/40” ZONING REGULATIONS AND SURROUNDING  
PROPERTY VALUES IN NEW YORK CITY**

By

Lance Freeman  
Columbia University

*35 PAGES*

March 26, 2008



### Abstract

Adult businesses have often been criticized as nuisances that have deleterious impacts, including a negative impact on property values, on surrounding neighborhoods. The study reported here investigates the relationship between businesses in New York City that feature exotic dancing that have been configured so that 61 percent of the floor space of the premises is devoted to nonadult uses and the remaining 39 percent is reserved for adult cabaret dancing (so called “60/40 businesses”) and surrounding residential property values. The study uses conventional social science methods that have been developed to discern how environmental traits affect property values. The results indicate that once differences in property characteristics are accounted for; there is consistent relationship between proximity to a 60/40 business and assessed property values. Indeed, certain specifications of our statistical models show properties nearer 60/40 businesses had higher assessed values than those further away. These results are for the most part consistent with the most rigorous studies that have tested the hypothesis of secondary effects due to proximity to an adult business. For the most part, other studies employing conventional social science methodology have also failed to find evidence of secondary effects.

## INTRODUCTION

Adult businesses have often been criticized as nuisances that have deleterious impacts, including a negative impact on property values, on surrounding neighborhoods. According to this school of thought, the social stigmatization of adult businesses due to the nature of the activities occurring within these businesses spills over into the surrounding neighborhood thereby stigmatizing this area as well through what are known as “adverse secondary effects.” Among the most widely presumed adverse secondary effects are decreases in property values as a result of the presence of an adult business. Based on this secondary effects thesis, a number of municipalities have enacted land use controls that restrict the location of adult businesses to “protect” surrounding communities from these negative effects. Several studies have also been conducted purporting to document the relationship between adult businesses and surrounding neighborhoods. These studies, however, have generally used unacceptable ad-hoc methodologies that do not systematically address the fact that properties near adult businesses might differ from other properties. Thus, the justification for land use controls for adult businesses rests on scant empirical evidence.

The study reported here investigates the relationship between businesses in New York City that feature exotic dancing that have been configured so that 61 percent of the floor space of the premises is devoted to nonadult uses and the remaining 39 percent is reserved for adult cabaret dancing (so called “60/40 businesses” due to the fact that at least 40 percent of the establishment must be devoted to adult use in order to be considered an “adult business”) and surrounding property values. The study uses

conventional social science methods that have been developed to discern how environmental traits affect property values. The results of this analysis speak directly to the veracity of claims regarding the secondary effects of these businesses on surrounding properties.

### **BACKGROUND<sup>1</sup>**

Since 1976, the United States Supreme Court has decided a series of cases focusing on whether the free speech clause of the First Amendment allows cities and states to enact legislation controlling the location of adult businesses. These zoning regulations (e.g., laws or ordinances that prevent a sex-related business from operating within a certain number of feet from residences, schools and houses of worship or a given distance from one another) have been predicated on the notion that cities and other municipalities have a substantial interest in combating so-called negative secondary effects on the neighborhoods surrounding adult businesses. These secondary effects have most often included alleged increases in crime, decreases in property values, and other indicators of neighborhood deterioration in the area surrounding the adult business. Typically, communities have either conducted their own investigations of potential secondary effects or have relied on studies conducted by other cities or localities.

In the last 25 years, beginning with the 1976 case, *Young v. American Mini Theatres Inc.*,<sup>21</sup> several United States Supreme Court decisions have provided guidance as to what constitutes permissible government regulation of the location of adult entertainment establishments under the free speech clause of the First Amendment. The

Court has normally subjected ordinances that restrict the location of adult businesses to an evaluation under the framework for content-neutral restrictions on symbolic speech set forth in the four-part test in *United States v. O'Brien*.

Justice Powell applied the four-part *O'Brien* test in his concurring opinion in *Young*. In this case, the Court upheld a Detroit zoning ordinance that regulated the location of adult theaters. The ordinance mandated that adult theaters not locate within 1,000 feet of any two other regulated uses or within 500 feet of a residential area. The Detroit ordinance did not attempt to eliminate adult entertainment; rather its aim was to disperse such businesses in an effort to minimize so called negative secondary effects. In upholding this ordinance, the plurality opinion of the Court reaffirmed the doctrine that a statute (including a zoning ordinance) must have a real and substantial deterrent effect on legitimate expression before it will be invalidated. The Court said the ordinance was not an invalid prior restraint on protected expression because it had neither the intent nor the effect of suppressing speech, but was aimed at controlling the secondary effects caused by adult businesses on surrounding uses.

In another landmark decision regarding a municipality's attempt to control secondary effects allegedly caused by adult businesses, *City of Renton v. Playtime Theatres*, the Court upheld a Renton, Washington, zoning ordinance that, although not banning adult businesses altogether, did prohibit them from locating within 1,000 feet of any residential zone, church, park, or school. The Court held that the Renton ordinance did not restrict First Amendment rights, as the purposes of the ordinance were unrelated

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<sup>1</sup> This section is based on the author's discussions with Dan Linz of the University of California, Santa

to the suppression of speech, and the restrictions were the least intrusive means by which to further the government's interests. Part of the constitutional precedent set forth by the decision in *Renton* is a three prong test stipulating that an ordinance must: 1) be content neutral and only aimed at curbing secondary effects, 2) provide alternate avenues of communication, and 3) further a substantial governmental interest.

It is noteworthy that in this case the Court stated, for the first time, that a city interested in restricting the operation of adult businesses was not required to show adverse impact from the operation of adult theaters, but could instead rely on the experiences of other cities as a rationale for supporting the passage of an ordinance. Prior to this ruling, the lower Court of Appeals found that "because the Renton ordinance was enacted without the benefit of studies specifically relating to the particular problems or needs of Renton, the city's justifications for the ordinance were conclusory and speculative".

The Supreme Court maintained that the Court of Appeals had required an unnecessary burden of proof on the city. The Court ruled that Renton could rely primarily on experiences of, and studies produced by the nearby city of Seattle as evidence of a relationship between adult uses and negative secondary effects. Thus, the Court ruled that the First Amendment does not require a city to conduct new studies or produce new evidence before enacting an ordinance, so long as the evidence relied upon is reasonably believed to be relevant to the problem the city faces.

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Barbara, and McCarthy et al. 2001.

In later years, the Court has considered the constitutionality of anti-nudity ordinances passed by municipalities or states that have relied on negative secondary effects to justify the legislation. The Court in *Barnes v. Glens Theater Inc.*, held that the State of Indiana could regulate nudity. Justice Souter and a plurality of the Court ruled that the government could undertake such regulation on the basis of the presumed negative secondary effects on the surrounding community. More recently, in *City of Erie v. Pap's A.M.* the Court again held that municipalities have the right to pass anti-nudity ordinances. Again, however, the Court was divided. Three Justices agreed with Justice O'Connor's opinion that combating negative secondary effects associated with adult businesses was a legitimate basis for the imposition of an anti-nudity ordinance.

Justice Souter's dissent in the *Pap's* decision is noteworthy. He significantly revised the position he took regarding secondary effects in *Barnes*. In *Pap's*, Justice Souter admitted that the evidence of a relationship between adult businesses and negative secondary effects is at best inconclusive. He called into question the reliability of past studies that purported to demonstrate these effects and suggested that municipalities wishing to ban nudity must show evidence of a relationship between adult businesses and negative secondary effects.

Most recently, Justice O'Connor joined by the Chief Justice, Justice Scalia and Justice Thomas concluded that the city of Los Angeles acted reasonably when it relied on a study it conducted in 1977 to demonstrate that its present ban on multiple-use adult establishments serves its interest in reducing crime. The Court held that the municipality might rely on any evidence that is reasonably believed to be relevant for demonstrating a



connection between speech and a substantial, independent governmental interest.

However, the Court noted: “This is not to say that a municipality can get away with shoddy data or reasoning. The municipality’s evidence must fairly support its rationale for its ordinance. If plaintiff’s fail to cast direct doubt on this rationale, either by demonstrating that the municipalities evidence does not support its rationale or by furnishing evidence that disputes the municipality’s factual findings, the municipality meets the *Renton* standard. If plaintiffs succeed in casting doubt on a municipality’s rationale in either manner, the burden shifts back to the municipality to supplement the record with evidence renewing support for a theory that justifies its ordinance. See, e.g., *Erie v. Pap’s A.M.* 529 U.S. 277, 298.

#### **Prior Studies of Secondary Effects**

The Court's opinion in *Renton* established that cities themselves are not required to show adverse impact, but could rely on other cities’ experiences to establish that a sufficient government interest was at stake. Since *Renton*, a number of cities, counties, and states have undertaken investigations intended to establish the presence of such secondary effects and their connection to adult facilities. These studies have, in turn, been shared with other municipalities and generally served as the basis for claims that adult entertainment establishments are causally related to harmful secondary effects, such as increased crime and decreases in property values. Many local governments across the United States have relied on this body of shared information as evidence of the secondary effects of adult businesses. Further, in most cases, cities and other governmental agencies

have used the experiences of a core set of studies from other locales as a rationale for instituting regulation of such businesses in their own communities.

This recent expansion of the negative secondary effects "doctrine" to include not only the zoning of adult businesses but now the regulation of the content of expression within these establishments, begs the question: How reliable and valid are "studies" conducted by individual municipalities and shared nationwide with other municipalities attempting to regulate the location of, and most recently, erotic expression within, adult businesses?

The basic requirements for the acceptance of scientific evidence such as the secondary effects studies were prescribed by the Supreme Court in the 1993 case of *Daubert v. Merrell Dow*. In *Daubert*, Justice Blackmun held that there are limits on the admissibility of scientific evidence offered by "expert witnesses" in federal courts. The Court noted that scientific knowledge must be grounded in the methods and procedures of science and must be based on more than subjective belief or unsupported speculation. Offering observations as to how this connection can be made, the Court provided a list of factors that federal judges could consider in ruling on a proffer of expert scientific testimony, including: the notion of falsifiability, peer review and publication, error rate, and adherence to professional standards in using the technique in question.

It is important to keep these standards in mind when considering the body the research that has been brought to bear to support. This research is discussed in the following section. For a full, critical evaluation of the literature, see: Bryant Paul, Daniel Linz, and Bradley Shafer (2001).

The body of social science research sponsored by the 1970 Presidential Commission on Obscenity and Pornography in the United States was the first systematic academic foray into the study of the affects of exposure to sexually explicit materials. Consistent with the more liberal Court rulings in the 1960's, the commission concluded that there were no scientifically demonstrated harmful effects of pornography and recommended legalization of all forms of sexually explicit communication.

Since the 1980s social scientists have extensively tested the feminist socio-legal theory regarding pornography's effect on attitudes that justify violence towards women, undermine viewer sensitivity to female victims of rape and violence, and increase discriminatory behavior. According to one researcher "literally hundreds of studies have been published in this field...yet the results of this vast body of empirical work are both inconclusive and hotly contested (Boyle p.187; See Cumberbatch and Howitt (1989); Gauntlett (1995,1997) and Miller and Philo (1998) for reviews of this evidence).

Although social scientists have extensively studied the relationship between pornography and behavior, there is a dearth of research conducted by social scientists that tests the secondary effects thesis that under girds much of the land use legislation restricting the location of adult businesses. Studies have been done, but as will be shown below, for the most part they have relied on ad hoc methods that do not systematically address the fact that properties near adult businesses might differ from other properties. The notion of professional standards described above is suggestive of the use of techniques that are generally accepted in social science.

In social science, the gold standard for establishing causality is the use of an experiment where one randomly selected group receives a treatment and another randomly selected control group does not. Because it is hard to imagine a scenario whereby adult businesses are randomly assigned to certain neighborhoods, some type of quasi-experimental research design would be necessary to meet the standard of social science. At a minimum, this would entail some attempt to systematically control for the possibility that properties close to an adult business might differ from properties not proximate to an adult business.

Four studies have been most frequently cited (and relied upon) to establish the extent of negative secondary effects. These studies, designated by city are: Indianapolis, IN (1984), Phoenix, AZ (1979), Los Angeles, CA (1977), and St. Paul, MN (1978). These studies have been cited as evidence of the relationship between adult entertainment businesses and negative secondary effects by no less than 27 different municipalities (Bryant, et al, 2000).

Among the studies, the St. Paul, Minnesota (1978) work represents the most methodologically sound of all of the empirical research we reviewed. Ironically, given its widespread use as justification for passing regulations designed to combat secondary effects, the study does not claim to have found any support for the existence of a relationship between sexually oriented adult entertainment businesses and negative secondary effects.

The research examined all 76 census tracts within the St. Paul region. They compared all tracts containing adult entertainment establishments with all of those that

did not. The study compared levels of neighborhood deterioration, determined by examining crime counts, housing values, and market and legal influences over the study period, for study and control areas and maintained a substantial time lag between the first and second measures of deterioration. Changes in neighborhood climate between the first and second measures were considered reliable neighborhood changes rather than erratic fluctuations in social activity.

The study found no relationship between sexually oriented businesses and neighborhood deterioration. In fact, the study found that the only factor that was predictive of neighborhood deterioration was whether an alcohol-serving establishment operated within the area. No relationship was found to exist between neighborhood deterioration and the presence of establishments that both served alcoholic beverages and offered live nude entertainment.

The Los Angeles, California (1977) study is perhaps the most often incorrectly referenced of any empirical research investigating the effects of adult oriented businesses on surrounding areas. Although this study is a frequently relied upon piece of research cited for establishing the relationship between adult oriented businesses and negative social repercussions, including deleterious effects on property values, the researchers did not find any significant support for such a connection.

The first part of the study was based on the comparison of average property value changes for five study areas and four control areas. Each of the five study areas was chosen because it contained a known cluster of adult entertainment businesses. The four control areas were chosen because of their proximity and supposed similarity to at least

one of the study areas, and because they did not have an adult entertainment business operating within their borders. All of the study and control areas were in Hollywood, North Hollywood, or Studio City.

In this part of the study, the researchers reported that it was difficult to find any consistent increase or decrease in property values associated with adult businesses. This result was based on comparisons that showed that while treatment and control areas both decreased in average value, there was a far larger decrease in the control (non-adult) area. Further, treatment (adult) areas increased in value by more than 400% over their comparable control (non-adult) areas. The researchers concluded that there is "...insufficient evidence to support the contention that concentrations of sex oriented businesses have been the primary cause of these patterns of change in assessed valuations between 1970 and 1976."

Another portion of the Los Angeles study used survey results to establish that the public is strongly opposed to the operation of adult businesses. Importantly, the study did not obtain a random sample of respondents. Without adherence to this requirement, one cannot calculate an error rate and the reliability of the results cannot be determined.

The Indianapolis, Indiana (1984) is probably the report most widely cited by municipalities as evidence of negative secondary effects. The overall study offered equivocal findings regarding the supposed relationship between adult businesses and negative secondary effects. The study contained reports of four separate analyses, each with significant methodological problems that undercut its reliability. The most striking example of this was a survey that asked a national sample of real estate appraisers who

were not from Indianapolis to consider only a hypothetical scenario concerning adult businesses in an unspecified community.

The Indianapolis report claimed to have found a substantially smaller increase in property values for the treatment areas relative to the control areas. However, the researchers failed to match adequately treatment and control areas for this analysis. The analysis compared the average home mortgage value and average number of homes sold for the control and study areas discussed in the first study, as well as those for the center township area. The study reported that the average mortgage value for the control areas and central township area increased by 77% and 56% respectively, while the treatment areas saw only an average increase of 26%. However, vast differences in initial mortgage values associated with the failure to properly match control and study areas rendered the two areas far too dissimilar to be considered as suitable comparison groups.

Other frequently referenced studies by municipalities are reports produced by: Austin, TX (1986); St. Paul, MN (1987/1988); Amarillo, TX (1977); Detroit, MI (1972); Beaumont, TX (1982); and, Kent, Washington (1982). The Beaumont, TX (1982) and Detroit, MI (1972) studies are not empirical. The Beaumont study, for example, is merely a report prepared by the planning department of that municipality, suggesting a need for regulation of adult businesses. The remaining four reports failed to meet one or more of the necessary criteria for a scientifically valid study of adverse secondary effects.

All of the studies cited claimed to find a negative relationship between adult businesses and the quality of surrounding neighborhoods. None of the cited studies,



however, used methodology that systematically addresses the fact that properties near adult businesses might differ from other properties.

### **The 1994 City of New York Study**

The City of New York (1994) commissioned a study “to determine the nature and extent of the secondary impacts of adult entertainment uses on communities in the city.” The study also cited the results of several other studies (including several of those described above) purporting to have examined the link between adult businesses and property values. All of the studies cited claimed to find a negative relationship between adult businesses and the quality of surrounding neighborhoods. None of the cited studies, however, used methodology that systematically addresses the fact that properties near adult businesses might differ from other properties.

One of the cited studies (City Planning Commission 1977) speculated that the proliferation of adult businesses in the Time Square area could be related to disinvestment in that area without any type of systematic comparison to support this claim. Another study reported that after the number of adult businesses in the Time Square area was reduced a number of major investments were undertaken in the area (Office of Midtown Enforcement (1983). But no comparison of other neighborhoods was included in this analysis, nor any attempt to consider if other factors could have been responsible for the investments.

Another cited study in the City of New York report relied on the impressions of business owners located near adult businesses to draw the conclusion that the proliferation of adult businesses was harmful to the community (Chelsea Action Coalition

and Community Board 4, 1993). The most rigorous of the cited studies compared the appreciation of assessed values on blocks with adult businesses with assessed value appreciation on blocks without adult businesses (Insight Associates 1994). This study did find greater appreciation rates on blocks without adult businesses. Although superior to the ad hoc approaches described above, it is difficult to ascertain if the control blocks truly are the same as the blocks with adult businesses, therefore the findings of this last study should be treated with caution.

The City of New York's study also included several analyses conducted by the Department of City Planning to ascertain secondary effects on property values. These included a survey of real estate brokers, the majority of whom were of the opinion that at distances of 500 feet or 1000 feet, adult businesses would diminish the market values of properties. Another analysis, using the methodology described above whereby the appreciation of assessed values on blocks with adult businesses were compared with assessed values appreciation on blocks without adult businesses found no difference in appreciation rates between the two different types of blocks. Because of the shortcomings of this approach that were described above, however, little confidence can be placed in this result.

#### **The "60/40" Land Use Legislation in New York City**

Despite the problems inherent in the research approach undertaken by the City, the Department of City Planning adopted a set of regulations developed in 1995 for Adult use in 1998. These regulations were adopted on the basis of the study conducted by the Planning Commission had shown that triple-X video and bookstores, adult live or movie

theaters and topless or nude bars have significant negative impacts on the neighborhoods in which they are located. These impacts, according to the Planning Commission include negative effects on economic development and property values (DCP Study at iv -- ix, pp. 56-65). The 1995 regulations were intended to address those adult establishments with a “predominant, on-going focus on sexually explicit materials or activities.”

In general terms, the 1995 Regulations restrict the permitted locations of such adult establishments by prohibiting them in all residence districts, certain commercial districts and manufacturing districts that permit new residential uses; by requiring that adult establishments be at least 500 feet from such districts; by requiring that each adult establishment in a permitted location be at least 500 feet from another such establishment; and by requiring that adult establishments be at least 500 feet from certain ‘sensitive receptors’ (schools, day care centers, and houses of worship). The amendments were designed to ‘minimize the potential for adverse secondary effects throughout the city’ and protect those areas and uses ‘particularly vulnerable to the negative effects of adult uses.’

The Commission stated that as a general guideline an establishment would need to have at least 40 percent of its accessible stock and floor area dedicated to adult material in order to make it similar to the establishments in the Commission study. This guideline developed into the so-called ‘60/40’ standard embodied in guidelines issued by the Department of Buildings, the agency charged with enforcement of the guidelines.

After implementation of the 1995 ordinance a number of adult business owners reconfigured the premises of their businesses so as to not offer adult entertainment or

materials in a “substantial portion” of the premises. This reconfiguration may allow the businesses to operate as nonadult businesses and thus not be required to maintain a buffer of 500 feet from residences, sensitive receptors and from other adult establishments.

For the most part, these alterations, as they have been undertaken for eating and drinking establishments that feature topless dancing, have included configurations so that the adult entertainment takes place in a section of the establishment which comprises less than 40 percent of the establishment’s total floor area. To date, it is difficult to determine exactly how many eating and drinking establishments are operating in this fashion since, as noted by the Planning Commission, the interior configurations and method of operation of these establishments are subject to change.

The City, however, contends that the 60/40 guidelines were never intended to apply to eating and drinking establishments and that court rulings “have mistakenly applied an analysis under which, once it is found that an eating and drinking establishment ‘regularly features’ adult entertainment, it must then be determined whether a ‘substantial portion’ of the floor area of the establishment is dedicated to that adult entertainment.” (DPC N 010508 ZRY, pg 35). Further, the city noted that there has never been a finding of fact in any judicial or other enforcement proceeding that adverse secondary impacts are curtailed through the adoption of a 60/40 configuration by these eating and drinking establishments.

The present investigation is concerned with whether adverse secondary effects in the form of lower property values are associated with eating and drinking establishments

that have configured themselves according to the 60/40 guidelines. Below we lay out a conceptual framework for investigating whether these negative effects are present.

## **CONCEPTUAL FRAMEWORK FOR THE PRESENT ECONOMIC ANALYSIS--**

### **THE HEDONIC APPROACH**

Despite the prevalence of land use regulations that restrict adult businesses, evidence to support their rationale—that adult businesses negatively impact property values-- is surprisingly thin.

Probably the most sophisticated examination of the secondary effects thesis is that done by McCarthy, Renski and Linz (2001). This study examined whether properties within one kilometer of an adult business appreciated more slowly than properties further away within the city of Charlotte, North Carolina. By comparing appreciation rates in a systematic manner, this study avoids the ad hoc approaches described above. The authors found “price appreciation rates for housing near adult clubs are at least as high as those further away in eleven of the twenty study years” (McCarthy et al., 2001, p. 19). The authors concluded that there was “no evidence that negative secondary effects on house price appreciation can be found in two decades of housing transactions in Mecklenburg County, North Carolina” (McCarthy et al., 2001, p. 21).

A methodology for ascertaining secondary effects that meets the standards of conventional social science that compliments the method employed by McCarthy et al. (2001) is employed in the present study. We use the hedonic approach to estimate the impact of 60/40 businesses on surrounding residential properties. Hedonic models are regression models that attempt to decompose the value of a property into implicit prices

paid for each of the various attributes of the property, such as rooms, yard, fireplaces, maintenance levels, year of construction—as well as attributes associated with the property's surroundings (Rosen, 1974; Rothenberg et al. 1991). The latter includes everything from the quality of local schools, proximity to shopping, and potentially, proximity to 60/40 businesses. The notion here is that homes with a different bundle of attributes will sell for different prices and that a property's sales price can be predicted if one measures the amount of each attribute and then multiplies that amount by its implicit price, and aggregates everything. Using the hedonic method each attribute, then, has a discernible impact on the value of the property. The measurement of the value of each attribute is accomplished by the use of multivariate regression, which allows us to isolate and estimate the impact of each characteristic on the property's value while holding constant potentially confounding factors.

Hedonic approaches have been used extensively by social scientists to discern the effect of environmental characteristics of property values. Examples include investigations of the effect of subsidized housing (Freeman and Botein, 2002; Galster et al. 1999; Lee et al. 1999; Lyons and Loveridge, 1993; Nourse 1963), landfills (Hite et al., 2001; Kohlhase, 1991; Nelson et al. 1992), and transit facilities (Huang 1996; Ryan 1999) on property values.

Use of a hedonic approach to determine the impact of 60/40 businesses on property values entails using the value of the property as the dependent variable, proximity to a 60/40 business as the independent variable, and the characteristics of each property and its surrounding neighborhood as the control variables. The regression

coefficients of each variable can thus be interpreted as the impact each of these characteristics has on the property's value. Therefore, should a regression of property values on the properties' housing and neighborhood attributes produce a positive and statistically significant coefficient for the attribute "distance from 60/40 business" this would suggest the market penalizes proximity to a 60/40 business. This would also be consistent with the notion that 60/40 businesses have adverse effects on surrounding neighborhoods, for whatever reason (fear of crime, adversity to nudity, etc.). Alternatively, if the coefficient for the attribute "distance from 60/40 business" was either substantively small, negative, or statistically insignificant, this would imply those 60/40 businesses did not have a discernible impact on surrounding properties.

### **METHODOLOGY**

This research utilizes the RPAD data obtained from Community Studies of New York. This data is the record of assessed values of properties in 1998 in New York City used for tax purposes. Consequently, our analysis will examine the effect of 60/40 businesses on assessed property values. Although assessed values are an estimate of how the market values a particular property, and hence bound to include some measurement error, using assessed values does have the advantage of being able to include all the properties in the study area as part of the analysis. In contrast, an analysis based on actual sales data will typically include a small nonrandom sample of all properties in a given year. Whether the observed sales transactions are actually representative of all properties in a given area is unknown. We limit our analysis to housing properties, as these are the type of properties likely to be most sensitive to proximity to a 60/40 business.



Our analysis examined the effect of 36 New York City 60/40 businesses on assessed property values. Of the 36, six are in the Bronx, 11 are in Manhattan, and 19 are in Queens. These businesses were chosen because they had attempted to comply with the New York 60/40 zoning regulations by devoting the majority of the business floor space to nonadult activity, thus rendering these businesses not ‘predominately’ adult use. Table one lists the clubs included in this analysis and is in the appendix of this report, as are all subsequent tables.

### **Model Specification**

In our hedonic models the assessed value of the property is the dependent variable while the characteristics of the property are considered the control variables. Proximity to a 60/40 business is the independent variable of interest. To control for the effect of neighborhood characteristics we used a zip-code level fixed effects approach. Because some of the 60/40 businesses were close to the zip code boundaries, we also included those properties that fell outside of the zip code but were within 5,000 feet of a 60/40 business. This means our sample was limited to zip codes within New York City that have a 60/40 business, or that contain properties within 5,000 feet of a 60/40 business. In essence we will compare the assessed value of residential properties in proximity to a 60/40 business with other residential properties not in proximity to a 60/40 business but within the same zip code, or within 5,000 feet of the zip code boundary. Our dependent variable is the log of the assessed value per unit.

According to the secondary effects thesis, properties in proximity to a 60/40 business should be stigmatized and consequently be valued less than otherwise similar

properties further away from a 60/40 business. Therefore, we use distance in feet from a 60/40 business as the independent variable. If the secondary effects hypothesis is correct, this variable should be positive, meaning property values are higher as one moves further away from a 60/40 business, statistically significant, and substantively large.

A distance measure assumes a linear relationship between proximity to a 60/40 business and property values. It is possible, however, that the relationship is nonlinear, and the relationship between 60/40 businesses and property values only manifests itself at certain distances. Unfortunately, the theory is silent on the functional form of the relationship between proximity to a 60/40 business and property values. Therefore, we attempted the following specifications:

1. A dummy variable taking on a value of 1 if a 60/40 business is within 500 feet, and equal to 0 otherwise.
2. A dummy variable taking on a value of 1 if a 60/40 business is within 1000 feet, and equal to 0 otherwise.
3. A dummy variable taking on a value of 1 if a 60/40 business is within 2000 feet, and equal to 0 otherwise.

Although these distance designations are somewhat arbitrary, these distances were cited by a majority of real estate brokers (80% cited 500 feet and 54% 1000 feet) in one study as distances within which the negative secondary impacts of adult businesses would be observed. Beyond 1000 feet, only 25% of the real estate brokers believed an impact would be observed (Department of City Planning 1994). Thus to the extent secondary effects exist, it seems reasonable to assume that they should be observed within 1000 feet.

Nevertheless we include a 2000-foot specification as an additional robustness check.

According to the secondary effects thesis these variables should be negative, meaning properties within the distance rings have lower values, statistically significant, and substantively large.

An additional non-linear specification that was attempted was a quadratic specification which entails including a squared term for the distance measure. This quadratic specification does not restrict the relationship between 60/40 businesses and property values to a linear one, but rather allows for the possibility of decreasing or increasing returns to property values as a result of 60/40 business proximity. According to the secondary effects thesis the net effect of the distance measure and its squared counterpart should be substantially large, statistically significant and positively related to the property values prices (meaning the further one is away from a 60/40 business the higher the property values).

Some properties are proximate to more than one 60/40 business and this raises the possibility that a concentration of 60/40 businesses might to exert a stronger nonlinear impact on surrounding properties than a single 60/40 business. To explore this possibility we also attempt three specifications indicative of proximity to a concentration of 60/40 businesses at varying distances. These independent variables were specified as follows:

1. A dummy variable equal to one if the property is within 500 feet of more than one 60/40 business, and equal to 0 otherwise.
2. A dummy variable equal to one if the property is within 1000 feet of more than one 60/40 business, and equal to 0 otherwise.

3. A dummy variable equal to one if the property is within 2000 feet of more than one 60/40 business, and equal to 0 otherwise.

The secondary effects thesis predicts that these dummy variables will be statistically significant, substantively large, and negative, meaning properties within the distance rings of respective concentrations of 60/40 businesses have lower values.

We thus have eight (8) specifications of a model of the relationship between proximity to a 60/40 business and property values. The secondary effects thesis suggests the independent variables should be statistically significant and substantively meaningful. The conventional 95% level of confidence will be used to determine statistical significance.

One of the assumptions of the Ordinary Least Squares (OLS) regression model estimation is that the stochastic error  $\varepsilon$  is independent and identically distributed. If the error term were independently distributed it would imply that the value of a given property in say area A would be unrelated to the value of another property in say area B. However, in our conceptual framework we argue that real property may indeed be affected by surrounding neighborhood attributes including the value of adjacent properties, which is a violation of  $\varepsilon$  being independently distributed. So to correct for this autocorrelation of  $\varepsilon$  described above, as well as any violation of the assumption that  $\varepsilon$  is identically distributed, we estimate our models using the Huber/White/Sandwich corrected standard errors.

Table two lists the definitions of the variables used in the analysis and Table Three provide descriptive statistics.

## Results

The first set of results we present are simple comparisons of assessed property values between properties proximate to a 60/40 business and properties further away. This is a naïve approach that does not consider if the properties close to a 60/40 business are systematically different from other properties. Although naïve, it can still be quite informative by shedding light on the nature of the relationship and that which is likely to be observed. If properties near 60/40 businesses were assessed at lower values than other properties this would explain the perception that the 60/40 businesses lower property values. This would not be a very convincing argument of causality, as it does not control for differences in property characteristics, but it would at least explain the perception.

The results presented in Table four, provide little evidence on the existence of secondary effects. The second row suggests properties within 500 ft of a 60/40 business have assessed values that are substantially lower than those outside this distance threshold. This difference, however, is not statistically significant. As the threshold distance increases to 1000 feet the relationship between proximity to a 60/40 club reverses. Properties within 1000 feet actually have higher assessed values, although this difference is not statistically significant. At 2000 feet the properties further from 60/40 businesses had lower mean values than those within the 2000 foot threshold and this result was statistically different from zero. Taken together the bivariate analyses are inconsistent with the secondary effects thesis. The only statistically significant difference found properties within 2000 feet of a 60/40 businesses having higher assessed values than those further away. But this simple bivariate comparison does not take into

consideration the possibility that properties within 2000 feet of a 60/40 business could be systematically different from other properties. Consequently, this apparent relationship does not make a convincing case for causality.

### **Multivariate Results**

The multivariate analyses allow us to come closer to establishing whether any causal relationship between 60/40 businesses and property values exist because differences in the physical characteristics of the properties are controlled for. In addition, by using a zip-code level fixed effects approach we hold constant any difference that could be due to neighborhood characteristics. We discuss only the results for the independent variables of interest, proximity to a 60/40 business, and for the first model discussed measures of goodness of fit for the entire model. The measures of goodness of fit for subsequent models were essentially the same as for the first model discussed, hence for the entire models.

The first set of results is presented in the second and third columns of Table Five and use the distance in feet from a 60/40 business as the independent variable. The regression coefficient for this variable can be interpreted as meaning that for every additional 100 feet away from a 60/40 business, property values decrease by .00283 percent. Although this result is statistically significant, the magnitude of this relationship is so small as to be substantively unimportant. The direction of the relationship is also inconsistent with the secondary effects thesis that postulates a detrimental impact on property values exerted by 60/40 businesses. Here proximity to a 60/40 business is

associated with *higher* albeit only modestly higher property values. This finding directly contradicts the secondary effects thesis.

The model as a whole performs fairly well. The F-statistic indicates the independent variables taken together have a statistically significant relationship to the dependent variable. As indicated by the  $R^2$  the model explains approximately 70% of the variation in assessed property values. The models discussed below are also statistically significant and similar in explaining approximately 70% of the variation in assessed property values.

To examine the possibility that the relationship between a 60/40 business and property values is nonlinear, the next set of results includes a squared term for the distance measure. The results of this nonlinear specification are presented in columns four and five in Table Five. The p-values show that neither the distance variable nor its squared counterpart is statistically significant. This suggests that whatever the relationship between proximity to 60/40 businesses and property values, it is not captured by quadratic specification.

Table Six uses dummy variables representing rings of 500, 1000, and 2000 feet away, respectively, from a 60/40 business. These results are presented in the second and third, fourth and fifth, and sixth and seventh columns, respectively of Table Six. The statistically significant coefficients in columns two and four show that properties within 500 feet of a 60/40 business sold for an 11% premium, while properties within 1000 feet sold for an approximately three percent premium. The last two columns of Table Six show there was no statistically significant difference between property values within 2000

feet of a 60/40 business and those further away. As a whole, the results in Table Six are inconsistent with the secondary effects thesis. The relationships that were statistically significant indicate proximity to 60/40 businesses is associated with *higher* property values, the opposite of what the secondary effects thesis would predict.

The final set of results is presented in Table Seven. These models test the relationships between proximity to concentrations of 60/40 businesses within 500, 1000, and 2000 feet, respectively. The second and third columns show properties within 500 feet of more than one 60/40 business had 12% higher property values than those beyond 500 feet of more than one 60/40 business. The fifth and sixth columns do not show a statistically significant relationship whereas the sixth and seventh column show a statistically significant and negative relationship between properties within 2000 feet of more than one 60/40 business and those beyond 2000 feet. That is, properties within 2000 feet of more than one 60/40 business had assessed values that were nine percent lower than other properties, *ceterius paribus*.

The findings presented in Table Seven are somewhat contradictory. On the one hand, properties within 500 feet of a concentration of 60/40 businesses had higher values compared to those beyond 500 feet. In contrast, properties beyond 2000 feet had higher property values than those more proximate to 60/40 businesses. And the test of more than one property within 1000 feet was not statistically significant. Taken together, we can only infer that the relationship between concentrations of 60/40 businesses and property values is not particularly robust. Different specifications yield vastly different results.



In sum, the results of these analyses provide little evidence to support the secondary effects thesis, which states adult businesses have a negative impact on property values. In only one of eight models presented were the relationships statistically significant, substantively meaningful and in the direction the secondary effects thesis would suggest. Moreover, in several of the models proximity to a 60/40 business was associated with *higher* property values.

### CONCLUSIONS

The methodological approach used here, the hedonic methodology, is the method most widely used by social scientists to answer the question of how a neighborhood attribute, such as a 60/40 business, affects property values. The validity of the modeling method has been established through peer-reviewed research published in leading housing research journals. The model is estimated using an extensive, publicly available data set. The data captures all assessed properties in New York City. Thus, the study presented here meets the requirements established by the Court for admissibility of scientific evidence.

The results indicate that once differences in property characteristics are accounted for, there is no consistent significant difference in the assessed values of properties near a 60/40 businesses and those further away. Indeed, it was more often the case that properties proximate to 60/40 businesses had *higher* assessed values than those further away, a relationship in direct contradiction to the secondary effects thesis.

The findings of this study cast doubt directly on the City's assumption that adverse secondary impacts are associated with 60/40 configuration eating and drinking

establishments. The present investigation examined whether adverse secondary effects in the form of lower property values are associated with eating and drinking establishments that have configured themselves according to the 60/40 guidelines. The results indicate that once differences in property characteristics are accounted for, there is no consistent significant difference in the assessed values of properties near a 60/40 businesses and those further away. These findings would seem to suggest that the burden is now upon the City to demonstrate that their original contention about these businesses and negative secondary effects is, in fact, correct.

### **General Applicability of the Findings**

These results are for the most part consistent with the most rigorous studies that have been tested the hypothesis of secondary effects due to proximity to an adult business (e.g., McCarthy et al. 2001). For the most part, other studies employing conventional social science methodology have also failed to find evidence of secondary effects.

This study by itself, however, cannot be taken to be the final word on secondary effects. First, the analysis presented here is limited to one city. Thus, the results may not be generalizable to other parts of the country. Second, this analysis only examines property values at one point in time. Despite these drawbacks, one can still conclude that the evidence presented here is inconsistent with the secondary effects thesis.

Since a core set of studies have been, and continue to be, relied upon by hundreds of local municipalities as evidence of negative secondary effects, a central concern must be the methodological rigor, and therefore trustworthiness, of these studies. This is particularly true given the precedent the Supreme Court established that a municipality

must show that such regulations are necessary to further the governmental interest of ameliorating secondary effects.

In this paper we have indicated that there is reason to challenge the assumption made by communities across the United States that past studies of secondary effects show an empirical relationship between adult businesses and negative effects. There is also no legitimate basis for extending the secondary effects doctrine to the regulation of expression within adult businesses based on these studies. The study has provided a method for measuring secondary effects of proximity to adult establishments. Application of the method shows no evidence that negative secondary effects on assessed property values in New York City.

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## **APPENDIX**

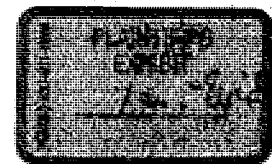
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Exhibit 12 (November 16-17, 2006, Focus Probe Inc., "Perceived Differences  
Between Adult Entertainment Clubs With 'Subdued Facades' vs. 'Loud Facades')  
(Pages 1559 Through 1576)

EXHIBIT

Perceived Differences Between  
Adult Entertainment Clubs With  
"Subdued Facades" vs. "Loud  
Facades"

Market Research Study  
Conducted in NYC November 16-17, 2006  
By Focus Probe Inc.  
New Milford, CT



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JNR-001472

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## Market Research Objective

Focus Probe Inc. ("Focus Probe") was commissioned to conduct market research by the lawyer representing Pussycat Lounge, Inc. and others in a case pending in the Supreme Court for the State of New York, County of New York, litigating the constitutionality of the City of New York Zoning Resolutions relating to Adult Entertainment. The study design and questionnaire were prepared in conjunction with Professor Bryant Paul of Indiana University.

Focus Probe was informed that Pussycat Lounge and many similar businesses originally operated adult cabarets with loud garish exterior signage and most, if not all, of the interior floor space was devoted exclusively to the presentation of the form of adult entertainment commonly known as "topless" or "nude" dancing. Focus Probe was further informed that following certain amendments to the City's zoning resolution, Pussycat Lounge and these other businesses modified their exterior signage and remodeled their interior space, changing them in two important respects: (1) modifying the exterior signage so as to significantly de-emphasize or eliminate any ongoing focus on the "topless" or "nude" nature of the entertainment being presented; and (2) reducing the amount of space devoted to such "adult" entertainment to less than 40% of the floor space of the pre-existing cabaret and developing the other 60+% of the floor space for a variety of non-adult business purposes, not involving "topless" or "nude" dancing or other forms of "adult" entertainment.

Given these assumptions, the objective of my study was to determine whether the change to lower profile signage, standing alone, was likely to have a significant impact on the perception of New York City residents concerning the quality of life in the neighborhoods in which such businesses operated.

For purposes of this study, New York City residents were shown pairs of photos of a single club, with one version showing a "subdued facade" (virtually identical to the type of facade presently operated by at least one of the current 60-40 businesses) and another photo of the same club but computer-modified to show a "loud facade" with signage and graphics created to be consistent with the appearance of most of these businesses before their conversion. The respondents were not told anything concerning the nature of the business activities occurring within each club, but were asked to indicate their perceptions based solely on the perceived differences in the exterior appearances of the loud and subdued facades.

## Market Research Method

This study was conducted using the "Street Intercept" method of approaching individuals in public spaces. Adults age 18+ were intercepted in parks and other leisure spaces in New York City and asked to participate in a study about the quality of life in New York by interviewers dressed in distinctive red jackets to make clear that this was a legitimate study and not a sales intrusion.

The study was conducted on November 16 and 17, 2006, by a team of 12 young men and women working in Bryant Park and Union Square in Manhattan and on Flatbush Avenue in Brooklyn. Each interviewer was instructed to approach adults 18+ to fill out the questionnaire and to avoid discussing it or biasing the results. Respondents who did not live in the five boroughs of New York City were thanked and excluded from the study.

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## Research Design

Respondents were presented a folder with a questionnaire and just one pair of photos of city street scenes for their reaction and comparison. To totally eliminate the variables of showing different clubs and different street scenes, the same street and location were used for each separate pair of clubs, with a total of three different streets and locations being used in all. Each pairing was based on the outward appearance of a currently existing club, though subject to computer-generated photographic modifications so the real names of the clubs would not be used.

The "Subdued facade" club was shown essentially as it is today, but with a fictitious name. Using the same scene and the same name, the photo for the "Loud facade" club was digitally altered to show sexually oriented signs and provocative graphics which we were told were typical of clubs in NYC prior to attempts to comply with 60-40 regulations in 1998.

To expose the sampling group to a variety of clubs, the sample of 651 individuals was divided into three segments of 200 or more respondents each. Each respondent saw only *one set* of the three pairs of photos.

One segment was exposed to a pair of photos of a club renamed "Player."

The second segment was exposed to a pair of photos of a club renamed "Frills"

The third segment was exposed to a pair of photos of a club renamed "Winners."<sup>1</sup>

To eliminate order bias, each pair of clubs was shown half the time with the "Subdued facade" club first and half the time with the "Loud facade" club first.

Questionnaires were color coded to match with the appropriate pair of photos.

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<sup>1</sup> In the real world, the club depicted as "Player" is actually a club named "VIP Club", located at West 20<sup>th</sup> in Manhattan; the club depicted as "Frills" is actually a club named "Lace", located on 7<sup>th</sup> in Manhattan; and the club depicted as "Winners" is actually a club named "Scores", located at East 60<sup>th</sup> St. in Manhattan. The original photos of these three "real world" clubs, which served as the models for this study, are reproduced on the final page of this report.

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## Questions

Respondents were each given the following five questions, asking them to view the pair of photos and compare and contrast their perceptions of the "Subdued facade" club with the "Loud facade" version of the same club:

1. Based only on these pictures, which of the immediately surrounding neighborhoods do you think is more likely to have a better overall quality of life?
2. Based only on these pictures, in which neighborhood do you think it would be safer to walk down the street?
3. Suppose you lived in or near each of these two neighborhoods. Based only on these pictures, in which neighborhood do you think you would prefer to continue living?
4. Based only on these pictures, in which of these two neighborhoods do you think the *average person* would rather continue living?
5. Based only on these pictures, and assuming all of the stores in each neighborhood were exactly the same, in which of these two neighborhoods do you think you would be more likely to go shopping?

(A sample of the actual questionnaire is included as an exhibit.)

## Sample Composition

The total sample for this study was 651 adults. Some respondents skipped demographic questions in this self-administered questionnaire.

### By Place of Residence

Manhattan	228
Brooklyn	212
Bronx	65
Queens	89
Staten Island	21
No answer	36

### By Gender

Male	276
Female	254
Skipped question	121

### By Age

18-40	355
40+	190
Skipped question	106

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## Summary of Findings

- A clear majority thinks neighborhoods pictured with "Subdued facades" would have a Better Quality of Life than those pictured with "Loud facade" clubs
  - 68% selected "Subdued facade" clubs as much more or somewhat more likely to have a Better Quality of Life
  - Only 14% selected "Loud facade" clubs; 18% think there is no difference
- A majority said neighborhoods pictured around "Subdued facade" clubs look safer
  - 64% think "Subdued facade" club neighborhoods look safer compared to only 10% for "Loud facade" clubs. 26% said there looks like no difference
- A majority (65%) would prefer to continue living in a neighborhood with a "Subdued facade" club than a "Loud facade" club, compared to only 10% who would prefer living near a "Loud facade" club.
  - 26% would not find either any more or less favorable than the other
- A majority (63%) thinks the average person would prefer to continue living in a neighborhood with a "Subdued facade" club vs. a "Loud facade" club, compared to only 14% who think the average person would prefer living near a "Loud facade" club.
- 59% would be more likely to go shopping in a neighborhood pictured with a "Subdued facade" club than a "Loud facade" club
  - 23% would be equally likely to shop in either neighborhood; only 17% would shop in a "Loud facade" club neighborhood
- Photos of the club named "Frills" (Lace on 7<sup>th</sup> Avenue) used "A Gentlemen's Club" on the marquee. Results were identical to clubs not using the "Gentlemen's Club" description.

Results were remarkably consistent by gender and age.

*Q. 1: Based only on these pictures, which of the immediately surrounding neighborhoods do you think is more likely to have a better overall quality of life?*

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- Two-thirds surveyed (68%) think the neighborhoods pictured with "Subdued facade" clubs are more likely to have a better overall quality of life than the neighborhoods pictured with "Loud facade" clubs
- About 18% think there would be no difference whatsoever
- Only 14% thought neighborhoods pictured with "Loud facade" clubs would have a better overall quality of life
- Results are consistent among both males and females and both those younger and older
- Those exposed to photos of "Frills" and "Winner" as "Subdued facade" clubs were slightly more favorable than those exposed to "Player" club, which looked darker than the other two

	Total	Player Club	Frills Club	Winner Club	Males	Females	Age 18-40	Age 40+
SAMPLE	651	203	222	226	276	254	355	190
	100%	100	100%	100%	100%	100%	100%	100%
<u>"Subdued facade" Neighborhood</u>								
Looks Much More Likely	49%	39%	57%	50%	51%	50%	50%	52%
Looks Somewhat More Likely	19%	22%	16%	20%	17%	20%	18%	16%
Subtotal 60/40 Neighborhood	68%	61%	73%	70%	68%	70%	68%	68%
Looks like No difference Whatsoever	18%	24%	15%	16%	15%	20%	16%	20%
<u>"Loud facade" Neighborhood</u>								
Looks Somewhat More Likely	4%	5%	1%	5%	4%	3%	4%	4%
Looks Much More Likely	10%	10%	11%	9%	13%	7%	11%	9%
Subtotal 100% Adult	14%	15%	12%	14%	17%	10%	15%	13%
No Answer								

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*Q. 2: Based only on these pictures, in which neighborhood do you think it would be safer to walk down the street?*

- A majority, 64%, think neighborhoods pictured around "Subdued facade" clubs would be safer
- 26% think there would be no difference in perceived safety
- Only 10% think the neighborhoods pictured with "Loud facade" clubs would be safer, perhaps because there might be more pedestrians and activity
- Results were consistent by gender and age

	Total	Player Club	Frills Club	Winner Club	Males	Females	Age 18-40	Age 40+
SAMPLE	651	203	222	226	276	254	355	190
	100%	100	100%	100%	100%	100%	100%	100%
<b>"Subdued facade" Neighborhood</b>								
Looks Much Safer	47%	37%	49%	54%	48%	48%	46%	51%
Looks Somewhat Safer	17%	22%	14%	17%	16%	18%	17%	15%
Subtotal 60/40 Neighborhood	64%	59%	63%	71%	64%	66%	63%	66%
Looks like No difference Whatsoever	26%	30%	32%	16%	24%	25%	26%	25%
<b>"Loud facade" Neighborhood</b>								
Looks Somewhat Safer	3%	3%	1%	4%	3%	2%	4%	1%
Looks Much Safer	7%	8%	4%	9%	8%	7%	7%	8%
Subtotal 100% Adult	10%	11%	5%	13%	11%	9%	11%	9%
No Answer								

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Q. 3: Suppose you live in or near each of these two neighborhoods. Based only on these pictures, in which neighborhood do you think you would prefer to continue living?

- A majority, 63%, would prefer to continue living in neighborhoods pictured around "Subdued facade" clubs vs. "Loud facade" clubs
- An average of 26% would not find either any more or less favorable than the other
- Only 10% would prefer to live in neighborhoods pictured around "Loud facade" clubs

	Total	Player Club	Frills Club	Winner Club	Males	Females	Age 18-40	Age 40+
SAMPLE	651	203	222	226	276	254	355	190
	100%	100	100%	100%	100%	100%	100%	100%
<b>"Subdued facade" Neighborhood</b>								
Prefer to continue living Much More	46%	37%	49%	54%	48%	48%	46%	51%
Prefer...Somewhat More	17%	22%	14%	17%	16%	18%	17%	15%
Subtotal 60/40 Neighborhood	63%	59%	63%	71%	64%	66%	63%	66%
Neither more or less favorable	26%	32%	32%	16%	24%	25%	26%	25%
<b>"Loud facade" Neighborhood</b>								
Prefer...Somewhat More	2%	3%	1%	4%	3%	2%	4%	1%
Prefer to continue living Much More	8%	8%	4%	9%	8%	7%	7%	8%
Subtotal 100% Adult	10%	11%	5%	13%	11%	9%	11%	9%
No Answer	1%	2%	1%		1%			1%

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1567

Q. 4: Based only on these pictures, in which neighborhood do you think the average person would prefer to continue living?

- A majority, 64%, think the average person would prefer to live in a neighborhood pictured with a "Subdued facade" club rather than one with a "Loud facade" club
- 22% think the average person would not find either neighborhood any more or less favorable than the other
- Only 14% think the average person would prefer the "Loud facade" club neighborhood

	Total	Player Club	Frills Club	Winner Club	Males	Females	Age 18-40	Age 40+
SAMPLE	651	203	222	226	276	254	355	190
	100%	100	100%	100%	100%	100%	100%	100%
<b>"Subdued facade" Neighborhood</b>								
Avg. person prefer Much More	45%	37%	50%	49%	49%	45%	45%	53%
Avg. person prefer Somewhat More	18%	22%	14%	18%	14%	19%	16%	14%
Subtotal 60/40 Neighborhood	63%	60%	64%	67%	63%	64%	61%	67%
Neither more or less favorable	22%	28%	19%	19%	20%	22%	23%	19%
<b>"Loud facade" Neighborhood</b>								
Avg. person prefer Somewhat More	4%	3%	3%	5%	4%	4%	4%	3%
Avg. person prefer Much More	10%	9%	12%	9%	12%	9%	11%	10%
Subtotal 100% Adult	14%	12%	15%	14%	16%	13%	15%	13%
No Answer	1%		2%		1%	1%	1%	1%

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1568



Q. 5: Based only on these pictures, and assuming all of the stores in each neighborhood were exactly the same, in which of these two neighborhoods do you think you would be more likely to go shopping?

- A majority, 59%, would be more likely to shop in neighborhoods pictured with "Subdued facade" clubs
- 23% would be equally likely to shop in either neighborhood
- 17% would be more likely to shop in neighborhoods around the "Loud facade" clubs

	Total	Player Club	Frills Club	Winner Club	Males	Females	Age 18-40	Age 40+
SAMPLE	651	203	222	226	276	254	355	190
<u>"Subdued facade" Neighborhood</u>								
Much more likely to go shopping	44%	37%	52%	41%	40%	49%	43%	48%
Somewhat more likely to shop	15%	19%	10%	16%	14%	13%	12%	14%
Subtotal 60/40 Neighborhood	59%	56%	62%	57%	54%	62%	55%	62%
Looks like No difference Whatsoever	23%	28%	20%	22%	22%	23%	27%	19%
<u>"Loud facade" Neighborhood</u>								
Somewhat more likely to shop	4%	4%	1%	8%	5%	4%	4%	4%
Much more likely to go shopping	13%	12%	15%	13%	18%	11%	14%	13%
Subtotal 100% Adult	17%	16%	16%	21%	23%	15%	18%	17%
No Answer	1%		2%		1%			2%

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Interviewer: Your initials: _____	Location: _____
Match photo codes to questionnaire color	
( ) white 101 above vs. 201 below,	( ) blue 201 above vs. 101 below
( ) pink 301 above vs. 401 below,	( ) yellow 401 above vs. 301 below
( ) buff 501 above vs. 601 below,	( ) gray 601 above vs. 501 below

Thank you for taking part in this survey about neighborhood life in NYC.  
 This survey is only for residents of New York City. In which borough do you live? [ ]  
 Manhattan, [ ] Bronx, [ ] Queens, [ ] Brooklyn, [ ] Staten Island  
 Is your age [ ] 18 to 40 or [ ] 40+? Male [ ] or Female [ ]

*Please compare these two pictures. Each shows a business located within a neighborhood. Answer the following questions related to the possible impact either of these businesses may have on their surrounding neighborhoods.*

Check only one answer for each question.

1. Based only on these pictures, which of the immediately surrounding neighborhoods do you think is more likely to have a better overall quality of life?

*Check only one*

- a) The neighborhood above looks much more likely to have a better quality of life. [ ]
- b) The neighborhood above looks somewhat more likely to have a better quality of life. [ ]
- c) It looks like there would be no difference whatsoever in the quality of life in these two neighborhoods. [ ]
- d) The neighborhood below looks somewhat more likely to have a better quality of life. [ ]
- e) The neighborhood below looks much more likely to have a better quality of life. [ ]

2. Based only on these pictures, in which neighborhood do you think it would be safer to walk down the street?

*Check only one*

- a) Neighborhood above looks much safer. [ ]
- b) Neighborhood above looks somewhat safer. [ ]
- c) It looks like there is no difference whatsoever in the level of safety in the two neighborhoods. [ ]
- d) Neighborhood below looks somewhat safer. [ ]
- e) Neighborhood below looks much safer. [ ]

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3. Suppose you lived in or near each of these two neighborhoods. Based only on these pictures, in which neighborhood do you think you would prefer to continue living?

*Check only one*

- a) I would prefer to continue living in neighborhood above *much more*. ☐
- b) I would prefer to continue living in neighborhood above *somewhat more*. ☐
- c) I would *not find either any more or less favorable than the other*. ☐
- d) I would prefer to continue living in neighborhood below *somewhat more*. ☐
- e) I would prefer to continue living in neighborhood below *much more*. ☐

4. Based only on these pictures, in which of these two neighborhoods do you think the average person would rather continue living?

*Check only one*

- a) I think the average person would prefer to continue living in neighborhood above *much more*. ☐
- b) I think the average person would prefer to continue living in neighborhood above *somewhat more*. ☐
- c) I think the average person would *not find either neighborhood any more or less favorable than the other*. ☐
- d) I think the average person would prefer to continue living in neighborhood below *somewhat more*. ☐
- e) I think the average person would prefer to continue living in neighborhood below *much more*. ☐

5. Based only on these pictures, and assuming all of the stores in each neighborhood were exactly the same, in which of these two neighborhoods do you think you would be more likely to go shopping?

*Check only one*

- a) I would be *much more likely* to go shopping in neighborhood above. ☐
- b) I would be *somewhat more likely* to go shopping in neighborhood above. ☐
- c) I would be *equally likely* to shop in either neighborhood. ☐
- d) I would be *somewhat more likely* to go shopping in neighborhood below. ☐
- e) I would be *much more likely* to go shopping in neighborhood below. ☐

Thank you for participating

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JNR-001485





JNR-001486





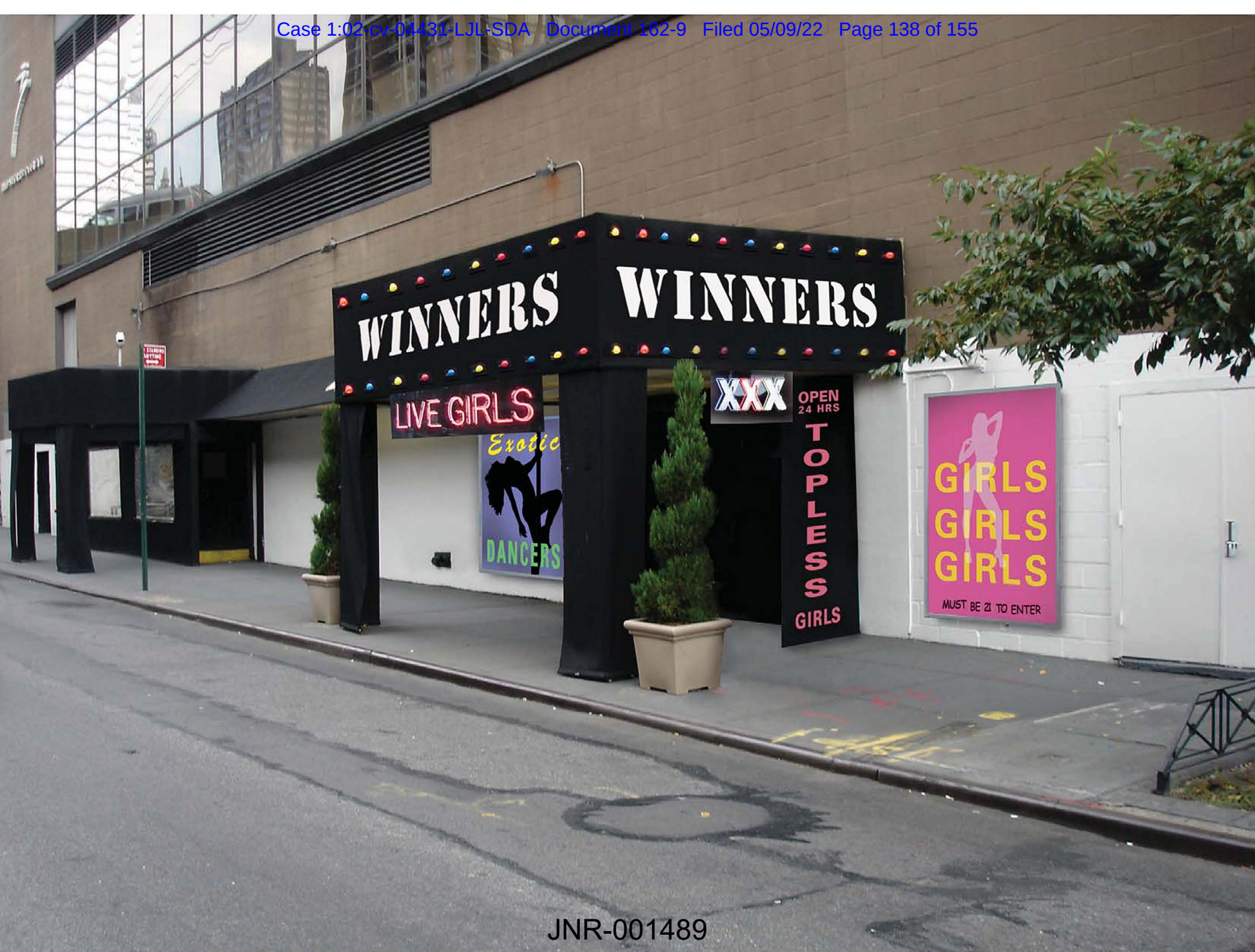
JNR-001487





JNR-001488





JNR-001489





JNR-001490



Lace, 7th Avenue & 47th Street, NYC, Sep. '06



VIP Club, 20 W. 20 St., NYC, Sep, '06



Scores, East 60<sup>th</sup> Street, NYC, Sep '06

**There are NO Bates Numbered Pages  
JNR-001493 through JNR-001495**



## NewsRoom

12/17/13 Int'l N.Y. Times 3  
2013 WLNR 31428296

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December 17, 2013

Going out in building boom, New York mayor pushes plans

CHARLES V. BAGLI

Bloomberg administration officials are determined to finish public reviews for a number of "legacy projects" before Mayor Michael R. Bloomberg leaves office.

The Bloomberg administration has been pushing through more than \$12 billion worth of real estate projects in its waning days, trying to solidify the mayor's claim to having transformed the face of New York City and lock in plans before Bill de Blasio takes over on Jan. 1.

The gusher of projects recently approved or on track for approval in Mayor Michael R. Bloomberg's final days include an outlet mall and a giant observation wheel on Staten Island, totaling \$580 million, and a relatively modest \$16 million building in Manhattan with 55 experimental micro-apartments, as well as a \$2 billion residential complex on the Brooklyn waterfront and the country's largest indoor skating complex, to be built in the Bronx.

Mr. Bloomberg has sought to remake the city's landscape for the 21st century, pushing for higher-density development and higher-quality design and opening up the city's vast waterfront to new residential, recreational and commercial uses. Nearly 40 percent of the city has been rezoned during the mayor's 12 years in office.

The man spearheading the efforts, the deputy mayor Robert K. Steel, and other officials have made it clear to the City Council, as well as to the real estate and

construction industries, that they are determined to finish public reviews for a number of "legacy projects" before Mr. Bloomberg leaves office.

The projects, which will begin construction well after Mayor-elect de Blasio takes office in January, also bind the new mayor to the old mayor's agenda, at least for a while. By Dec. 31, some projects, like a \$1.2 billion Hudson Yards office tower complex and a \$1.7 billion Hunter College and Memorial Sloan-Kettering Cancer Center complex, will have reached the point that they cannot be stopped or modified.

Others, like a soccer stadium in the Bronx, a Coney Island amphitheater and a residential complex at the former Domino sugar factory in Brooklyn, could still be halted or changed. The Domino project has won widespread support, but Mr. de Blasio has expressed "serious concerns" about a proposed \$350 million soccer stadium near Yankee Stadium because the Bloomberg administration planned to provide the soccer team's wealthy owners with public resources, including tax exemptions.

The Bloomberg administration has also granted tax breaks worth tens of millions of dollars for the first phase of the \$3 billion Willets Point project in Queens, for a proposed office tower on the West Side of Manhattan and for the outlet mall on Staten Island.

"They made no secret about the fact that they're working very hard to lock in a number of major projects for the future," said Brad Lander, a councilman from Brooklyn. "De Blasio said everything will be reviewed. But some things can be reviewed and changed more than others."

For his part, Mr. de Blasio, who was the city's public advocate before being elected mayor, opposed few projects during the Bloomberg era and embraced the notion of high-density development near transit centers. But he has made it clear that he will drive a harder bargain with developers to get the best deal for taxpayers. During his mayoral campaign, Mr. de Blasio also vowed "wholesale reform of our city's tax incentive policies that give hundreds of millions of dollars to office towers on Park Avenue and unaccountable one-shot subsidies to companies who can do without them."

Real estate developers and investors, who had a familiar ally in Mr. Bloomberg, will be watching for early signs of Mr. de Blasio's agenda. A spokesman for Mr.

de Blasio, Lis Smith, said he would "review every project with an eye toward maximizing affordable housing, good jobs and value for taxpayers."

Only one so-called legacy project — the rezoning of 73 blocks surrounding Grand Central Terminal for taller towers — failed, when the Bloomberg administration could not win the Council's support last month.

Even though the Council approved the Willets Point proposal to build a retail mall and housing next to Citi Field in Queens, the project still has critics, and Mr. de Blasio could make it difficult for developments like Willets Point by slowing approval of construction permits or delaying the use of government funds.

The Bloomberg administration has also pushed many small initiatives that critics contend should have been left for the next administration. The city recently solicited bids from private developers for a commercial complex within the Bedford Union Armory in Brooklyn, committed \$51.5 million in public funds to the restoration of the Loew's Kings Theater, which has been largely vacant for decades, and directed \$50 million to a cultural center at Hudson Yards that has yet to be designed.

Mr. Bloomberg has laid the groundwork for the transformation of New York by aggressively rezoning more than 12,000 blocks, almost 40 percent of the city, primarily for dense high-rise development. The Council recently approved the administration's 124th and last rezoning, in Ozone Park, Queens.

Many projects are rooted in the early days of Mr. Bloomberg's 12-year tenure and were steered by his first deputy mayor and chief development architect, Daniel L. Doctoroff. More than once, Mr. Bloomberg has said that Mr. Doctoroff, and by extension himself, had a "greater impact on this city, I think, than Robert Moses."

New York mayors have traditionally rushed through favored projects in the closing days of their administrations, and rarely has a new mayor upended his predecessor's work.

Before leaving office in 2001, Mayor Rudolph W. Giuliani signed a secret deal to build new stadiums for the city's two professional baseball teams, the Yankees and the Mets. Less than a month later, Mayor Bloomberg effectively scuttled the agreement, citing the city's more pressing civic needs after the terrorist attack on the World Trade Center.

But the Yankees and the Mets did get new stadiums, replete with city subsidies worth tens of millions of dollars.

Mr. Giuliani himself railed for years about Mayor David N. Dinkins's last-minute deal to build a new stadium at the National Tennis Center in Queens. But he did nothing to stop the project, other than bar his senior officials from attending the U.S. Open there.

"We haven't tried anything wacky at the last minute," Mr. Steel said. "We've worked hard to get a lot of things done. My focus, and the mayor's focus, has been on jobs and housing. And lots of private money."

Besides, Mr. Steel added, "there'll be lots of things that we began that the next mayor will reap. Projects we put in the oven will come out with the next administration, like Domino."

The City Planning Department has certified for public review a \$1.5 billion plan by Two Trees Management to transform the former Domino Sugar mill on the East River into an 11-acre residential complex with office space, a park and 2,100 apartments, 660 for moderate- and middle-income tenants. There may be some additional bargaining over concessions from the developer before the Council votes on the project.

Mr. de Blasio, who has named only a few of his top officials, has yet to announce who will serve as his administration's point person on economic development.

#### ---- Index References ----

News Subject: (Government (1GO80); Local Government (1LO75))

Industry: (Commercial Construction (1CO15); Construction (1CO11); Housing (1HO38); Real Estate (1RE57); Zoning (1ZO58))

Region: (Americas (1AM92); New York (1NE72); North America (1NO39); U.S. Mid-Atlantic Region (1MI18); USA (1US73))

Language: EN



Other Indexing: (Bill de Blasio; Rudolph Giuliani; Steel; Daniel Doctoroff; David Dinkins; Michael Bloomberg; Brad Lander)

Word Count: 1199

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End of Document

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**NewsRoom**

## A Third of the City Rezoned

Mr. Bloomberg and Amanda M. Burden, director of the Department of City Planning, rezoned 37 percent of the city and claimed credit for creating opportunities for high-density growth along subway corridors while preserving low-density neighborhoods. Critics said that this simply cleared the way for gentrification and that the city fell behind on building affordable housing for lower-income New Yorkers. An often-cited example is the dilapidated industrial waterfront in Williamsburg, now the city's nascent fifth skyline. Whether the luxury high-rises of Williamsburg are good or bad for the city is a matter of continuing debate among city politicians and residents, and is even a plot line in the HBO series "Girls."





[https://www.dailyfreeman.com/news/michael-bloomberg-s-nyc-mayorality-comes-to-an-end/article\\_901c8f2f-1abd-5150-b23d-9fc9674265b3.html](https://www.dailyfreeman.com/news/michael-bloomberg-s-nyc-mayorality-comes-to-an-end/article_901c8f2f-1abd-5150-b23d-9fc9674265b3.html)

## Michael Bloomberg's NYC mayoralty comes to an end

Dec 31, 2013

NEW YORK (AP) >> Michael Bloomberg walked out of City Hall for the final time as mayor late Wednesday, leaving behind him throngs of cheering staffers and an unquestioned impact on the nation's largest city.

The 108th mayor of New York, with gold balloons inflated to read "1-0-8" leading the way, paused briefly at the top of the stairs at 5:11 p.m. and smiled broadly at the hundreds of staffers and well-wishers who lined his path out of the building.

Waving as he walked, Bloomberg thanked the crowd, wished everyone happy new year and answered a reporter's question about how he was feeling with his 12 years in office down to their final hours.

"If I wasn't happy today, I don't know when I would be happy," he said.

But even as many in the crowd clamored for handshakes and photos and others tried to engage in conversation, Bloomberg kept moving, never fully stopping as he made his way across the City Hall plaza. He frequently boasted that as mayor he only looked to the future, never back with regrets, so it was perhaps fitting that the rarely sentimental billionaire remained clear-eyed as he moved quickly through the crowd, not looking back at the building where he served three terms.

JNR-001502

After greeting a few firefighters gathered outside the City Hall gates, Bloomberg disappeared down the subway steps and boarded a train toward his Manhattan home.

Unlike in the other years of his mayoralty, Bloomberg chose not to ring in the new year at Times Square. Instead, he was opting for an evening with family and friends before he returns to City Hall on Wednesday to attend the inauguration of his successor, Democrat Bill de Blasio, who was to officially become mayor at 12:01 a.m. Wednesday.

Bloomberg, an independent, bade farewell to his inner circle in his famed bullpen, the wall-less space on City Hall's second floor meant to resemble a Wall Street trading firm.

"I think it's fair to say we've done some amazing things," Bloomberg said in a video released by his staff. "But hopefully it's just the beginning. Now we're going to leave a good hand to play for the next administration."

Hours earlier, he gave his final speech to a group of religious leaders, thanking them for helping people in need and praising the city's diversity.

He also cited remarks by Pope Francis about the importance of cities, then quipped, "The fact that a Jewish kid can quote the pope in a secular building built by Protestants in front of Hindu, Muslim and Sikh leaders really says all you need to know about New York City."

Bloomberg dramatically reshaped the city, which has never been safer or cleaner. But his data-driven style sometimes left him unable to connect with those who felt left behind, and the gap between the city's privileged and poor grew dramatically during his terms.

Bloomberg has said he will go on a two-week vacation before resuming a role at the business media company that bears his name. He also plans to continue to fund his pet political causes, including gun control and immigration reform.

**The New York Times** | <https://nyti.ms/298zklj>

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ARCHIVES | 1993

## THE 1993 ELECTIONS: Staten Island; Secession Is Approved; Next Move Is Albany's

By **JAMES DAO** NOV. 3, 1993

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Residents of Staten Island yesterday took a step toward severing their ties to New York City by approving a new City Charter that is both a declaration of independence and the political foundation for what could become the state's second largest city.

With one-third of the precincts reporting at 11:15 P.M., residents were voting for secession by a 2-to-1 margin.

But whether the vote will be enough to prod the State Legislature and Gov. Mario M. Cuomo to give final approval for secession remains to be seen. Some officials have said that the proposal will need the support of more than 65 percent of voters before Albany views it as a mandate.

Yet even before all the votes were counted, advocates of secession were ebullient, saying yesterday's strong turnout demonstrated the deep alienation Staten Islanders feel toward New York City. And they expressed confidence that, regardless of the final tally, the Legislature and Mr. Cuomo will grant the borough independence. Present at the Creation

"We have a groundswell of feeling," said State Senator John J. Marchi, a Staten Island Republican who is considered a founding father of the secessionist

JNR-001504

movement. "Staten Island has the opportunity to participate in the creation of a city."

Turnout was very heavy in most precincts of the city's smallest and most suburban borough, where the issue galvanized voters who were worried about encroaching urban ills and frustrated by the island's small voice in the vast and seemingly unsympathetic city government.

The stage is now set for a complex political struggle in Albany where the issue is colored by conflicting political and regional loyalties. The Democratic-controlled Assembly is expected to oppose secession largely because almost half its members come from the city and are loath to see it divided. But the Republican-held Senate is likely to support the measure, if only to give solace to Staten Island's largely Republican electorate.

Mr. Cuomo, a Democrat who faces reelection next year, has not taken a public position on secession. Could Queens Be Next?

Come January, the legislators will grapple with whether they want to preside over the first major dismemberment of New York City since the five boroughs were united in 1898. They will also debate whether to set a precedent that could encourage secessionist fever around the state, particularly in Queens.

The proposed charter would establish a government much like New York City's. The mayor would manage citywide services and propose a budget, while a 15-member council would approve the budget and monitor city agencies. A comptroller would be the chief fiscal officer.

Yesterday's vote disappointed a loose coalition of anti-secessionists, which included people on fixed incomes concerned about higher taxes, city workers worried that they might lose their jobs because of residency requirements, and environmentalists who say a new city will feel pressure to encourage real-estate development to shore up its tax base.

In leaflets, phone calls and door-to-door campaigns, the anti-secessionists argued that a separate city of Staten Island will face tax increases because, according to studies, the borough contributes about \$170 million less in tax revenues than it receives in city services.

Closing that gap could involve reducing garbage collection, police patrols and fire companies, anti-secessionists say. "People would be screaming on the steps of

City Hall if the Mayor proposed this," said David Goldfarb, a lawyer who is leading the anti-secession effort. "Why does anyone think it will be acceptable in secession?"

The United Federation of Teachers contends that state school aid -- which is based partly on wealth -- will drop because Staten Island on balance is more affluent than the rest of the city. The union, which telephoned all 8,400 of its members who live on Staten Island to urge them to vote against the measure, says a loss in education aid could cause consolidation of schools or an increase in property taxes.

But such arguments seemed to have little impact on voters yesterday who, given the choice between higher taxes and greater control over their island, chose control.

"I pay a lot of taxes and get nothing back, and it's a sin having to fight with the Board of Education over who's going to teach my children moral issues," said Joanne Gentile, 35, as she voted at the Huguenot School yesterday. "With the money we pay in taxes we should have the best for our children here and we don't."

Four years ago, few in Albany thought yesterday's vote would ever occur. In 1989, the Senate passed legislation to allow Staten Island residents to establish a commission to write a new City Charter, largely as a favor to Mr. Marchi. Many thought the Assembly would reject the bill or that Governor Cuomo would veto it. Neither happened.

A version of this article appears in print on November 3, 1993, on Page B00004 of the National edition with the headline: THE 1993 ELECTIONS: Staten Island; Secession Is Approved; Next Move Is Albany's.



**Manhattan Lots Identified by Both City and Plaintiffs as Legally Permissible For Adult Use Establishments and Where Both Plaintiffs and Defendants Agree That At Least Some Types of New Commercial Business Could Be Established**

Count	BBL	Borough	Block	Lot	Address
1	1005980058	1	598	58	341 HUDSON STREET
2	1006450011	1	645	11	848 WASHINGTON STREET
3	1006457501	1	645	7501	837 WASHINGTON STREET
4	1006460001	1	646	1	40 10 AVENUE
5	1006460014	1	646	14	446 WEST 14 STREET
6	1006460018	1	646	18	440 WEST 14 STREET
7	1006460019	1	646	19	860 WASHINGTON STREET
8	1006460027	1	646	27	428 WEST 14 STREET
9	1006460057	1	646	57	421 WEST 13 STREET
10	1006467502	1	646	7502	450 WEST 14 STREET
11	1006720001	1	672	1	601 WEST 26 STREET
12	1006730001	1	673	1	261 11 AVENUE
13	1006750001	1	675	1	260 12 AVENUE
14	1006750012	1	675	12	613 WEST 29 STREET
15	1007050001	1	705	1	380 11 AVENUE
16	1007280060	1	728	60	442 WEST 31 STREET
17	1010890001	1	1089	1	1 RIVER PLACE
18	1010897501	1	1089	7501	601 WEST 41 STREET
19	1010897502	1	1089	7502	533 11 AVENUE
20	1010900001	1	1090	1	520 WEST STREET
21	1010907501	1	1090	7501	635 WEST 42 STREET
22	1010910001	1	1091	1	571 11 AVENUE
23	1010920007	1	1092	7	633 WEST 44 STREET
24	1010967501	1	1096	7501	660 12 AVENUE
25	1006540031	1	654	31	500 WEST 14 STREET
26	1007280055	1	728	55	432 WEST 31 STREET
27	1006450029	1	645	29	416 WEST 13 STREET
28	1010900010	1	1090	10	647 WEST 42 STREET

**Existing Manhattan Lots that Allow Adult Use Establishments**

Count	Block/Lot	Address	Zoning District	Special District	Built FAR	Allowed AUE Area (SF)	Total Lot Area (SF)	Percent of Lot Allows AUE
1	598/58	341 HUDSON STREET	M1-6	Hudson Square	16.03	10,345	50,632	20%
2	645/11	848 WASHINGTON STREET	M1-5		6.84	22,386	33,789	66%
3	645/29	416 WEST 13 STREET	M1-5		4.00	1,884	36,366	5%
4	645/7501	837 WASHINGTON STREET	M1-5		0.00	5,162	10,784	48%
5	646/1	40 10 AVENUE	M1-5		6.09	24,571	24,571	100%
6	646/14	446 WEST 14 STREET	M1-5		3.20	5,294	5,294	100%
7	646/18	440 WEST 14 STREET	M1-5		4.06	8,166	8,166	100%
8	646/19	860 WASHINGTON STREET	M1-5		6.16	15,922	15,922	100%
9	646/27	428 WEST 14 STREET	M1-5		5.20	9,692	10,713	90%
10	646/57	421 WEST 13 STREET	M1-5		5.85	3,662	7,705	48%
11	646/7502	450 WEST 14 STREET	M1-5		10.06	10,081	10,081	100%
12	654/31	500 WEST 14 STREET	M1-5		3.00	2,376	2,376	100%
13	665/11	PIER 78 (BLOCK 665/LOT 11)	M2-3		0.00	30,148	30,148	100%
14	672/1	601 WEST 26 STREET	M2-3		14.79	35,615	124,723	29%
15	673/1	261 11 AVENUE	M2-3		8.30	49,957	143,741	35%
16	675/1	260 12 AVENUE	M1-6		0.07	76,879	79,270	97%
17	675/12	613 WEST 29 STREET	M2-3		1.12	20,497	64,168	32%
18	676/1	601 WEST 30 STREET	C6-4	Hudson Yards	0.00	105,051	146,165	72%
19	702/150	560 WEST 33 STREET	C6-6	Hudson Yards	20.86	51,121	51,121	100%
20	705/1	380 11 AVENUE	C6-4	Hudson Yards	29.45	42,081	42,081	100%
21	706/1	400 11 AVENUE	C6-4	Hudson Yards	0.00	4,466	48,551	9%
22	728/55	432 WEST 31 STREET	C6-4	Hudson Yards	1.28	1,439	4,250	34%
23	728/60	442 WEST 31 STREET	C6-4	Hudson Yards	8.07	8,279	14,504	57%
24	1089/1	1 RIVER PLACE	C6-4	Clinton	8.79	99,919	100,329	100%
25	1089/7501	601 WEST 41 STREET	C6-4	Clinton	10.21	5,689	9,253	61%
26	1089/7502	533 11 AVENUE	C6-4	Clinton	19.16	18,382	51,236	36%
27	1090/1	520 WEST STREET	C6-4	Clinton	12.69	29,906	29,906	100%
28	1090/10	647 WEST 42 STREET	C6-4	Clinton	2.31	2,288	2,288	100%
29	1090/7501	635 WEST 42 STREET	C6-4	Clinton	9.52	29,382	46,320	63%
30	1091/1	571 11 AVENUE	M2-4	Clinton	5.99	42,208	133,449	32%
31	1092/7	633 WEST 44 STREET	M2-4	Clinton	6.21	28,461	36,330	78%
32	1094/11	638 WEST 47 STREET	M2-4	Clinton	0.57	5,604	5,604	100%
33	1094/12	639 WEST 46 STREET	M2-4	Clinton	2.00	8,394	12,680	66%
34	1094/17	629 WEST 46 STREET	M2-4	Clinton	1.14	8,264	19,474	42%
35	1095/11	620 JOE DIMAGGIO HWY	M2-4	Clinton	4.64	20,855	22,940	91%
36	1096/7501	660 12 AVENUE	M2-4	Clinton	2.94	20,967	82,106	26%